Nova Scotia
Department of
Agriculture and Marketing

Annual Report
1990

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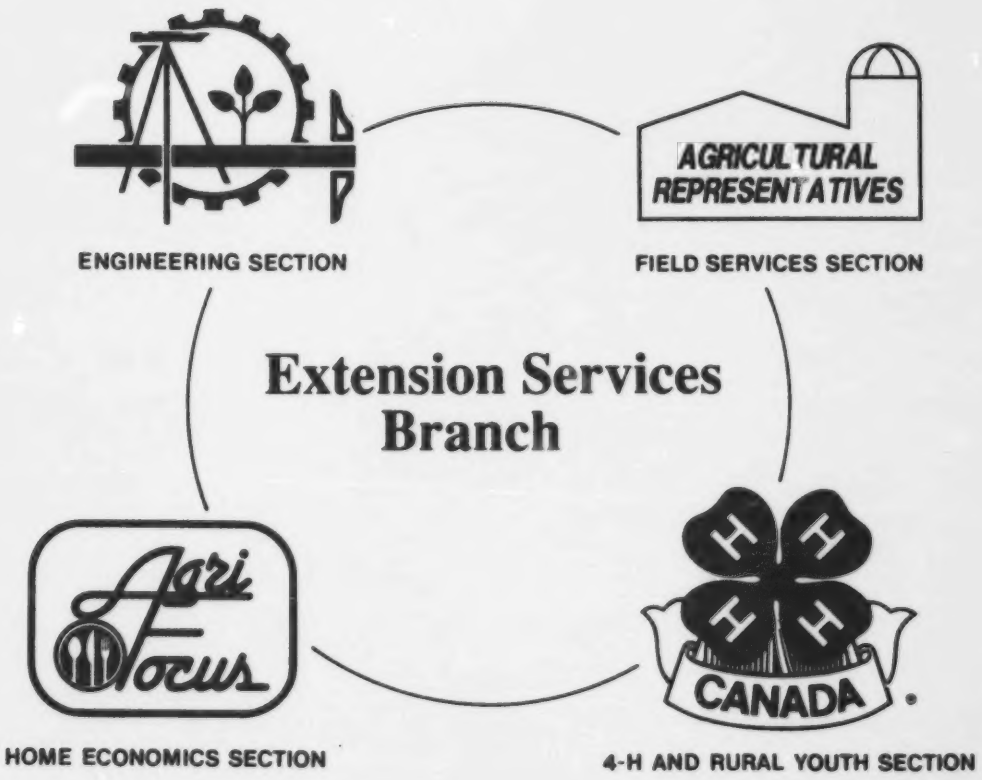

Nova Scotia

Department of
Agriculture and Marketing

Extension Services Branch

Mission Statement

Staff in the Extension Branch are primarily educators who offer high quality advice, information, service and educational programs to farmers/farm families, farm and rural organizations, agri-business and the public at large for the purpose of developing people, to promote and enhance a viable agricultural industry and to improve the quality of life for their clients.

1990 ANNUAL REPORT

EXTENSION SERVICES BRANCH

AGRICULTURE DEVELOPMENT DIVISION

This 1990 Annual Report provides an overview of the activities special projects and programs of the four sections of the Extension Services Branch - Field Services, 4-H & Rural Youth, Home Economics and Engineering.

The Nova Scotia Department of Agriculture and Marketing was restructured February 1, 1990 and a new Agriculture Development Division was created with Arnold Rovers as Executive Director. In the reorganization, Extension Services Branch became a part of the Agriculture Development Division. Farm Management Section was moved out of the Extension Branch but still remains within this Division. Farm Assistance Section also moved to Agriculture Services Division.

Staff of the Extension Services Branch continue to play a key role in the development of people and the agricultural industry in this Province. Last year, staff were involved in the development of a Mission Statement, a new Performance Appraisal System and a Client Input Survey for the Branch. Special thanks to Don Cameron, an OMAF exchange resource person, for his assistance and leadership in this process.

Finally, I want to thank Bob Bennett, Assistant Director, Supervisors and all Extension Branch Staff for the support and encouragement which I received during my first year as Director. Appreciation is also extended to Ralph Morehouse, Deputy Minister, Executive Directors, Branch Directors and all Department Staff for their cooperation and assistance.

Respectfully submitted,

David M. Sangster, P.Ag.
Director

92-02648/

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STAFF OF EXTENSION SERVICES BRANCH
DECEMBER 31, 1990

D.M. Sangster, BSc (Agr.) M.Sc., P.Ag.
Director, Truro, N.S.

R.A. Bennett, B.S.A., P.Ag.
Asst. Director, Truro, N.S.

Margaret Johnson, Secretary
Truro, N.S.

AGRICULTURAL REPRESENTATIVES

George MacKenzie, BSc (Agr.), P.Ag.	Mgr. Field Services, Truro
Harvey MacDonald, BSc (Agr.), P.Ag.	Sydney
Leo Cox, Agriculture Fieldman,	Mabou
Donald L. MacDonald, BSc(Agr.), P.Ag.	Antigonish
James Neary, BSc (Agr.), P.Ag.	Nappan
Yvonne Thyssen-Post, BSc (Agr.), P.Ag.	Truro
Joe Calder, BSc (Agr.), P.Ag.	Pictou
Gordon Crowe, BSc (Agr.), P.Ag.	Middle Musquodoboit
Weldon Smith, BSc (Agr.), P. Ag.	Windsor
Fred Walsh, BSc (Agr.), P.Ag.	Kentville
Arthur Pick, BSc (Agr.), P.Ag.	Bridgewater
Laurie Ells, BSc (Agr.), P.Ag.	Lawrencetown
Bruce Gilliatt, BSc (Agr.), P.Ag.	Weymouth
Robb MacMillan, BSc (Agr.),M.Agr. P.Ag.	Yarmouth

ASSISTANT AGRICULTURAL REPRESENTATIVES

Bev Connell, B.Sc (Agr.), M.Agr., P.Ag.	Kentville
Dean Manning, BSc (Agr.), AIT	Middle Musquodoboit

4-H REPRESENTATIVES

Elizabeth Crouse, BSc (Agr.), P.Ag.	Supervisor, Truro
Lynn Thurber, BSc, P.Ag.	Bridgewater
Marianne Ward, BSc (Agr.), A.I.T.	Lawrencetown
Ruth Withrow, BSc (Agr.), P.Ag.	Windsor
Jeff Wentzell, BSc (Agr.) AIT	Pictou
Bill MacLeod, BSc (Agr.), P. Ag.	Truro
Alan Porter, BSc (Agr.), AIT	Sydney

HOME ECONOMISTS

Susan Horne, BSc (H.Ec.), P.Ag.	Supervisor, Truro
Gail Keddy, BSc (H.Ec.), P.Ag.	Truro
Marjorie Knowles, R.N., BSc (H.Ec.), P.Ag.	Kentville
Valorie MacKinnon, BSc (H.Ec.), AIT	Bridgewater
Jane Lewis, B.HEc, M.AEd., AIT	Sydney
Cheryl Butts-MacMillan, B.HEc	Mabou
Colleen MacNeil, BSc (H.Ec.)	Antigonish

AGRICULTURAL ENGINEERING DIVISION

John Higgins, BSc (Agr.), M.Sc., P.Eng., P.Ag.	Chief Engineer, Truro
Hank Kolstee, B.Eng. (Agr. Eng.), P.Eng.	Supervisor, Land Protection, Truro
Peter Swinkels, BSc (Agr. Eng.), P.Eng.	Supervisor, Technicial Services, Truro

AGRICULTURAL ENGINEERS

Laurie Cochrane, B.Eng. (Agr. Eng.), P.Eng.	Truro
David Browning, B.Eng (Agr. Eng.), P.Eng.	Truro
Carl Esau, B.Eng. (Agr. Eng.), P.Eng., P.Ag.	Truro
Trent Webster, BSc (Agr. Eng.), P.Eng., P. Ag.	Truro
Gary Bishop, BSc (Agr.), P.Eng., P. Ag.	Truro
Larry Honey, B.Eng. (Agr. Eng.), MSc., P.Eng., P.Ag.	Kentville

TECHNICIANS

Robert Lawrence,	N.S.L.S., Surveyor	Truro
Bill Morley	Aboiteau Supt.	Annapolis Royal
Lindsay Carter	" "	Kentville
Brad Crewe	" "	Truro
Gary Gilbert	" "	Nappan
Ken Carroll	" "	Windsor
Gerard MacDonald	Agr. Technician	Truro
John Sullivan	" "	Truro
Bruce Curry	Draftsman	Truro
Dave Cameron	"	Kentville
Chris Curry	Land Imp. Insp.	Truro
John McCabe	" " "	Antigonish
Darrell Hingley	Surveyor's Asst.	Truro

CLERICAL STAFF

Carolyn Rushton	Truro
Susan Wilson	Truro
Michelle VanOirschot	4-H, Truro
Margie Clyke	Ext. Engineering, Truro
Linda Burchell	" " Truro
Carol Hudson	" " Truro
Cheryl Gillis	Sydney
Shirley MacDonald	Mabou
Marlene MacDonald	Antigonish
Laureen Boyd	Antigonish
Marie Matheson	Pictou
Sandra Strang	Nappan
Vacant	Middle Musq.
Dianne Johnson	Windsor
Cheryl Theriau	Kentville
Linda Fancy	Kentville
Donna Lombard	Kentville
Paulette Corkum	Bridgewater
Susan Bent	Lawrencetown
Barbara Heddy	Lawrencetown
Arlene Burton	Weymouth
Marie Thibodeau	Yarmouth

PERSONNEL

During 1990, the staff complement was constituted as follows:

Manager - Field Services	1
Agricultural Representatives	12
Asst. Agricultural Representative	2
Agricultural Fieldman	1
4-H Representatives	7
Agricultural Engineers	9
Home Economists	7
Technicians	13
Secretaries	23
Director & Asst. Director	2
TOTAL	77

TRANSFERS

To Agricultural Services Division:

R. L. Hayman, BSc (Agr.), M.Sc., P.Ag.	Executive Director, Truro
Ralph Murray, BSc (Agr.), P.Ag.	Manager, Asst. Programs, Truro
Al Connor, BA, MSc, P. Ag.	Special Programs Officer, Bridgewater
Jack Hicks, BA., B.D.	Special programs Officer, St. Peter's
David Livingstone, BSc (Agr.), P.Ag.	Co-ordinator, AFDA, Truro
Darlene Stevenson, BSc (Agr.), AIT	Program Manager, AFDA, Truro
Linda MacLellan	Secreary, AFDA, Truro
Laurie Bartlett, BSc (Agr.) AIT	Co-ordinator, ALFI, Truro
Linda McNutt	Secretary, ALFI, Truro
Mary Guinan	Secretary, Truro

To Agricultural Development Division:

Alan Grant, BSc. (Agr.) P. Ag.	Supervisor, Farm Mgt. Section, Truro
Peter Dekker, BSc (Agr.) P. Ag.	Sr. Farm Mg. Spec., Kentville
Jim Houghton, BSc (Agr.) M.Sc, P.Ag.	Farm Mgt. Spec., Truro
Vacant	Farm Mgt. Spec., Truro
Rhonda Bellefontaine, BSc (Agr.)	Technician, Truro
Pam Fraser	Technician, Kentville
Tracey Mitchell,	Secretary, Farm Mgt.

To Extension Services Branch

David Sangster, BSc (Agr.),M.Sc, P.Ag.	Director, Extension
Robb MacMillan, BSc, BSc (Agr.), M.Ag, P.Ag.	Ag. Rep., Yarmouth
Weldon Smith, BSc (Agr.), P.Ag.	Ag. Rep., Windsor
Joe Calder, BSc (Agr.), P.Ag.	Ag. Rep., Pictou
Jim Neary, BSc (Agr.), P. Ag.	Ag. Rep., Nappan
Bev Connell, BSc (Agr.) M. Agr. P. Ag.	Asst. Ag. Rep., Kentville
Margaret Johnson	Secretary, Ext. Br., Truro
Gary Bishop, BSc (Agr.), P.Eng, P. Ag.	Agr. Engineer, Truro

New Employees

Dean Manning, BSc (Agr.), AIT	Asst. Ag. Rep., Midd. Musq.
Alan Porter, BSc (Agr.), AIT	4-H Rep., Sydney
Jeff Wentzell, BSc (Agr.) AIT	4-H Rep., Pictou
Marianne Ward, BSc (Agr.) AIT	4-H Rep., Lawrencetown
Susan Bent	Secretary, Lawrencetown
Marlene MacDonald	Stenographer, Antigonish

Study Leave

Robb MacMillan, BSc, BSc (Agr.) P. Ag.	Recived Masters of Agr. University of Guelph
Bev Connell, BSc (Agr.), P.Ag.	Received Masters of Agr. University of Alberta

Resignations

Malcolm Fuller, BSc, P. Ag.	Agr. Rep., Yarmouth (Retired)
Joanne Beaton, BSc (Agr.) AIT	4-H Rep., Lawrencetown
Don Butler	4-H Rep., Pictou
Laura Canning	Secretary, Middle Musq. (Retired)
Karen Brown	Secretary, Lawrencetown

Nova Scotia

Department of Agriculture and Marketing

Extension Services Branch

1990 ANNUAL REPORT

AGRICULTURAL REPRESENTATIVES

Field Services Section

FIELD SERVICES SECTION

INTRODUCTION

The Agricultural Representative or Field Services Section continues to serve a broad range of rural clientele. Agricultural offices in fourteen locations across Nova Scotia, provide information and a wide variety of services to farm families, agri-business and the general public.

During the year 1990 our staff consists of twelve Agricultural Representatives, 2 Assistant Agricultural Representatives, 1 Agricultural Fieldman, 16 Clerical and 1 Manager, Field Services.

County or area Agricultural Representatives are responsible for:

- providing a front line delivery system
- promotion of a viable agricultural industry
- managing a county office
- administration of assistance policies
- providing educational upgrading
- communication of technical information
- leadership in planning and development
- promotion of agricultural awareness
- monitoring the agricultural industry

PROGRAMS & SERVICES

Farm visits, office calls, meetings and tours enable staff to keep in close contact with their clients and provide the counselling, advice and information required for todays agricultural industry.

The following statistical summary provides an indication of the extent of the contact and activities carried out by the Agricultural Representative staff.

Table 1:	1990	1989	1988	1987	1986
# Client Calls	5,557	5,008	5,896	6,320	6,149
# Office Calls	10,582	10,574	10,754	11,432	13,432
# Short Courses, Meetings & Tours	1,337	2,308	1,369	1,147	1,483
# People Attending Short Course, Meetings & Tours	32,015	27,809	38,612	34,461	37,451
# Letters Written	14,793	14,856	17,988	13,144	14,126
# Publications & Circulars Dist.	37,148	29,303	31,694	37,414	45,910
# Radio Broadcasts Made	144	155	244	174	262

Each Agricultural Representative area has a unique combination of physical and human resources; the challenge is to provide effective extension activities to meet the needs of our clientele.

Respectfully submitted,

George F. MacKenzie, P.Ag.
Manager, Field Services

GFM/smw

Introducing...

Cape Breton County and Richmond County

Some of the most picturesque shoreline in the province can be found in Cape Breton and Richmond Counties. Long lonely sand beaches stretch for miles along the coastline. Waves crash against rugged rock outcrops and small fishing boats bob around like toys. Inland there are brooks teeming with trout and woods abundant with deer.

The area was originally used as a fishing base for French, British and Spanish fleets in the 17th century. For several years Cape Breton alternated under French and British rule, being finally returned to the British in 1758. Today Cape Breton County is home to a large number of people of Scottish and Irish descent while Richmond County has a large Acadian population.

Farming has been traditionally combined with fishing and forestry by the people of the area. Most operations were small mixed farms located close to the industrial areas or part-time activities to supplement a fisherman's income. Dairy farming was the main operation, but most farms had some chickens, sheep and beef cattle too.

Agricultural development has been affected by the growth of the industrialized area in Cape Breton County, which provides the prime market for agricultural products. The City of Sydney and towns like Glace Bay have grown up around the coal and steel industries. As more work opened up in booming industrial Cape Breton, farmers left the country to work in the cities and towns. The farms became residential and recreational land.

Dairy production is the most important industry in Cape Breton/Richmond worth about $2.5 million in sales annually.

Poultry and vegetables account for much of the farm production in Cape Breton County. Small scale livestock enterprises are increasing with more emphasis on feed self-sufficiency. Cereal grains, berry crops, fur and greenhouse production are also found in the area.

RESOURCES

Climate

Growing Season (5°C): April 30 - Nov. 6 (190 days)

Frost Free Period (0°C):

Last Spring: May 15 - May 25
First Fall: Sept. 30 - Oct. 15
Duration: 140 - 150 days

Annual Precipitation: 1,400 - 1,450 mm
Growing Season Precipitation: 475 - 500 mm
Annual Degree Days Above 5°C: 1,400 - 1,600

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Cape Breton	Rich-mond	Province
No. of Farms	128	33	4,283
Under $2,500	34	15	1,113
$2,500 - $4,999	13	9	567
$5,000 - $9,999	21	2	578
$10,000 - $24,999	18	2	641
$25,000 - $49,999	10	2	316
$50,000 - $99,999	17	2	333
$100,000 - $249,999	9	0	466
$250,000 & Over	6	1	269

Farms Classified by Major Product
(Source: 1986 Census)

	Cape Breton	Rich-mond	Province
Dairy	25	2	698
Cattle	19	8	979
Hogs	0	0	132
Poultry	5	0	127
Grain	3	0	63
Other Crops	1	0	45
Fruit	4	1	367
Vegetables	7	0	90
Misc. Specialty	21	7	481
Mixed	9	0	188
Total Farms	94	18	3,170

Field Crops Hectares
(Source: 1986 Census)

	Cape Breton	Rich-mond	Province
Oats	55	n/a	5,230
Hay	1,878	240	68,398
Potatoes	16	n/a	1,633

1 hectare = 2.47 acres

Land & Soil

	Cape Breton	Richmond	Total
Total Land Area (ha) [1]:	314,328	140,368	454,696
Classes 2,3,4 Soil (ha) [2]:	69,911	34,081	103,992
Percentage of [2] to [1]:	22%	24%	23%

1990 IN REVIEW

- Dry weather conditions during the growing season resulted in crop yield reductions. Affected were pastures, vegetables and small fruits.

- The good working arrangement between N.S.D.A.M. staff, E.C.B.C. staff and the Federation of Agriculture has resulted in a very positive effect on agriculture.

- In order to provide more efficient sevice to clientele, these groups meet together on a monthly basis. A marketing specialist was assigned to E.C.B.C. during the year.

- Agricultural Awareness was featured at the Cape Breton Exhibition. The MacDonald Land Mini Farm had a considerable impact on those attending this show.

- Program activity has slowed considerably. Many larger dairy farms had used the ALFI program to switch to silage. Most of the activity under AFDA, concerns the Comprehensive Farm Development program.

- Farmers are improving existing land through drainage and removing windrows rather than clearing new land.

- Three cattle sales held during the year were disappointments. Prices were low, as the sales lacked major buyers.

- A major strip grazing project was started at the Mira Pasture. It was discontinued in August due to very dry conditions.

- The Richmond County Agricultural Association sponsored the P.E.P. projects. They also arranged for short courses on several commodities.

- A two-day forage and livestock seminar held in Sydney in February. The program was well attended, met a need and will be repeated.

- Update sessions were held on beef, poultry and vegetables.

- Little change in dairy, poultry and beef commodities; declines in sheep and fur.

- The largest beekeeper on Cape Breton has over 200 hives and won most of the honey classes at the A.W.F.

- Mark and Pam Eyking competited in the Atlantic Provinces Young Farmers of the Year Competition in Sussex.

Introducing...

Inverness County and Victoria County

Inverness and Victoria Counties are known for some of best scenery in the world. Huge mountain hills rise into the mist over a thousand feet above sea level while the rocky shoreline tumbles into the ocean below.

Cape Breton Island was originally used as a base for French, British and Spanish fishing fleets. The first settlement on the west coast was established at Cheticamp in 1786 and most of the small communities that sprung up along coastal Inverness County were French Acadian.

Victoria County was settled mainly by hardy Scottish immigrants between 1770 and 1830. Clearing the land was tedious work. They cut trees, removed the roots and rocks, and tilled the ground. In desperation some attempted to burn the trees, often with disastrous results.

The early settlers spent long hours tanning their own leather to make harnesses and footwear. They also sheared the sheep, and washed, carded, spinned and knitted or wove wool.

Farming, fishing and lumbering are still the main economic activities in the area.

Most of the land in Victoria County is more suited to pastureland and forestry than the cultivation of field crops. However, there are some extremely fertile sections like Boularderie Island where a variety of crops are grown.

Inverness County supplies milk and other livestock products to industrial Cape Breton. More than 6,000 acres of hay are cultivated annually as well as some wheat, oats and barley. In recent years maple syrup production has increased with several new operations having been established.

The concentration of population around the Sydney area provides a substantial market for agricultural products from Inverness and Victoria counties.

RESOURCES

Climate

Growing Season (5^{o}C): April 30 - Nov. 6 (190 days)

Frost Free Period (0^{o}C):

Last Spring: May 30 - June 14

First Fall: Sept. 15 - Oct. 15

Duration: 90 - 130 days

Annual Precipitation: 1,400 - 1,600 mm

Growing Season Precipitation: 450 - 500 mm

Annual Degree Days Above 5^{o}C: 1,600 - 1,700

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Inver-ness	Victoria	Province
No. of Farms	155	50	4,283
Under $2,500	59	14	1,113
$2,500 - $4,999	16	7	567
$5,000 - $9,999	22	8	578
$10,000 - $24,999	19	9	641
$25,000 - $49,999	10	6	316
$50,000 - $99,999	7	2	333
$100,000 - $249,999	16	4	466
$250,000 & Over	6	0	269

Farms Classified by Major Product
(Source: 1986 Census)

	Inver-ness	Victoria	Province
Dairy	25	8	698
Cattle	46	8	979
Hogs	0	0	132
Poultry	1	0	127
Grain	2	0	63
Other Crops	1	1	45
Fruit	3	0	367
Vegetables	0	1	90
Misc. Specialty	16	15	481
Mixed	2	3	188
Total Farms	96	36	3,170

Field Crops Hectares
(Source: 1986 Census)

	Inver-ness	Victoria	Province
Wheat	16	0	n/a
Oats	42	n/a	5,230
Barley	48	n/a	4,823
Hay	2,721	500	68,398

1 hectare = 2.47 acres

Land & Soil

	Inverness	Victoria	Total
Total Land Area (ha) [1]	415,004	307,499	722,503
Classes 2,3,4 Soil (ha) [2]*	111,097	32,642	143,739
Percentage of [2] to [1]	27%	11%	20%

1990 IN REVIEW

- Agriculture in this region did not see any major changes in 1990. The number of active farmers remained constant.
- Weather conditions were excellent, with very good quality forage being harvested. The first haylage was cut on June 9.
- Three dairy farms changed ownership. Additional quota was purchased. Low payout is a concern.
- The quality of purebred Holsteins continues to improve, evident in two good classification rounds. Some breeding stock moved out of area, a good sign.
- Approximated 300 feeder calves went through the Truro Beef Feeder Sale; another 100 to a P.E.I. feedlot, and about 175 to local feeders. Nine performance tested bulls were purchased at the Nappan sale.
- Most all beef producers are on the AFDA Comprehensive Farm Development Program.
- The Cape Mabou Community Pasture had 609 head for the season.
- More livestock producers going to large round bales and haylage.
- The coyote has become synonymous with sheep. One producer lost 120 lambs and 20 ewes on Cheticamp Island. Two producers using AK Bash guard dogs with success so far.
- Several fox ranchers pelted out due to low prices and no sales. The mink industry appears to have more confidence.
- The strawberry crop was average; there is some expansion in maple and blueberry yields were the best ever. There is some interest in vegetables.
- The Inverness County Federation of Agriculture continues to be a strong organization. They own selected pieces of equipment, but lost their combine in a fire.
- The Soils and Crops Committee established many plots and variety test trials. Soil sampling was done on 35 farms. Farmers interested in growing grain for the straw.
- The Eastern N.S. Holstein Club has been an asset to local dairy farmers. They work closely with our Department on many educational events.
- Agriculture continues to play a very important role in the total economy of this region.

Introducing...

Antigonish County and Guysborough County

The first European visitors to the shores of Antigonish and Guysborough counties were attracted by the wealthy fishing grounds of the Northumberland Strait, St. George's Bay and Strait of Canso. They were followed by more permanent Acadian French, Scots, Irish and New Englanders. Many had fled religious or political persecution, while others merely wanted a better way of life.

These early pioneers struggled to clear the land which was thick with trees. Land was not cleared particularly well in those early days. In fact, most farmers cultivated right around the tree stumps. While they were eventually able to grow hay, wheat and potatoes as well as raise cattle, horses and sheep, most supplemented their farm production with wild game and fish.

Today lumbering, fishing and farming are the most important sources of income in both counties. The $8 million dairy industry in Antigonish-Guysborough ranks third in the province. There are also seven poultry and and four hog producers.

There is a wide range of soils - the land alongside the rivers being particularly fertile. There are about 25 blueberry producers and six commercial strawberry producers.

Newfoundland was the main market for agricultural produce in the early 1800's and farmers often lost money on the transportation costs. The construction of the railway through the region in the late 1800's, the establishment of a car ferry service, and the completion of the Canso Causeway in 1955 opened up new market opportunities in Cape Breton. The causeway also created one of the best natural year-round ice-free harbours on the continent in the Strait of Canso.

During the 1950's and 1960's the arrival of a large number of farm families from the Netherlands contributed to the growth and development of agriculture, especially in Antigonish County.

RESOURCES

Climate

Growing Season (5°C): April 25 - Nov. 6 (195 days)

Frost Free Period (0°C):

Last Spring: May 15 - June 14

First Fall: Sept. 15 - Oct. 15

Duration: 90 - 150 days

Annual Precipitation: 1,200 - 1,400 mm

Growing Season Precipitation: 400 - 475 mm

Annual Degree Days Above 5°C: 1,400 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Antigonish	Guysborough	Province
No. of Farms	217	56	4,283
Under $2,500	42	20	1,113
$2,500 - $4,999	29	13	567
$5,000 - $9,999	29	8	578
$10,000 - $24,999	38	10	641
$25,000 - $49,999	16	2	316
$50,000 - $99,999	17	1	333
$100,000 - $249,999	35	2	466
$250,000 & Over	11	0	269

Farms Classified by Major Product
(Source: 1986 Census)

	Antigonish	Guysborough	Province
Dairy	56	6	698
Cattle	61	19	979
Hogs	6	0	132
Poultry	6	1	127
Grain	3	0	63
Other Crops	1	0	45
Fruit	12	4	367
Vegetables	1	0	90
Misc. Specialty	24	6	481
Mixed	5	0	188
Total Farms	175	36	3,170

Field Crops Hectares
(Source: 1986 Census)

	Antigonish	Guysborough	Province
Wheat	25	n/a	n/a
Oats	240	15	5,230
Barley	210	21	4,823
Mixed Grain	51	n/a	n/a
Hay	5,750	647	68,398

1 hectare = 2.47 acres

Land & Soil

	Antigonish	Guysborough	Total
Total Land Area (ha)[1]	145,309	424,259	569,568
Classes 2,3,4 Soil (ha)[2]*	87,001	57,528	144,529
Percentage of [2] to [1]	60%	14%	25%

***According to the Canada Land Inventory Classification system, the soils designated as Class 2, 3, or 4 are suitable for commercial agriculture. Class 2 is highly productive, Class 3 moderately productive, and Class 4 the least productive of the three. Class 4 usually requires some improvements like clearing of bush, cultivation methods or water control.**

1990 IN REVIEW

- Agriculture continues to be a very important industry in this area.
- Four out of 57 fluid milk producers sold off their quotas totalling 2,265 L. Half staying in county.
- Concern amongst producers regarding drop in payout percentage and cuts in MSQ. This affects net income.
- Average production per cow is increasing due to heavy culling. 72% of producers are on ADLIC.
- Most of the beef producers are on the Comprehensive Farm Development Program. For the most part they are part-time and in many cases are adding extra overhead to their program. Returns are still much too low.
- Sheep continues to decline. Coyotes are everywhere. Dept. of Lands and Forests captured 50 this year, but this did not alleviate the problem.
- Fur prices are discouraging. Many have left industry.
- No changes in hogs, poultry, greenhouse and strawberry commodities. Some increase in blueberries.
- The Antigonish/Guysborough Federation of Agriculture continues to be active.
- Lloyd and Bessie Sinclair, Goshen, won the 1990 'Farm of the Year' Award.
- The late John Corsten, Sr. was inducted into the Atlantic Agriculture Hall of Fame. A very popular and deserving honour for the Corsten family.
- The areas Soils and Crops Improvement Association has a membership of 75. Conducted pasture and weed trials, meetings on storage of forage.
- Many farmers switching from hay to haylage systems. A good number are using round balers to make silage. Presently 17 round balers and 8 wrappers in area.
- Eastern N.S. Holstein Club has been a very active and successful organization.
- Over 100 registered Holsteins shown at Eastern N.S. Exhibition.
- The Highland Harvest Classic sale average - $2,249. The highest in the Maritimes for such a sale.
- More land is being drained and less emphasis on new clearing.
- Most dairymen have completed modernization on their buildings, however, many are adding or upgrading their manure storage.
- More farmers are adding computer systems to their operations.

Introducing...

Pictou County

Pictou County was originally settled by Scottish and English settlers in the late 1700's. These people found lumbering at first more profitable than agriculture and worked the soil only to grow food for their immediate needs.

In 1820, markets began to expand with improved transportation and the development of mining and manufacturing. Farming became more profitable, so people began to expand their agricultural pursuits.

The era of coal mining beginning in 1827 as well as a booming timber trade and shipbuilding industry attracted people to the area from across the province and overseas.

However, agriculture remained the dominant activity and the largest employer. Canada's first census in 1871 indicated a population of 32,114 in Pictou County with farming listed as the occupation of more than 50% of those employed.

Agriculture attracted settlers into the rural areas of the county and held its position of economic importance until the 1880's. In the late 19th century, Pictou became a leader in heavy industry and attracted several manufacturing businesses. This included agriculture-related industries like tobacco processing, the manufacture of agricultural implements, cheese, and textiles.

As the 20th century approached, however, the construction of railways opened up more superior agricultural areas in the interior of the continent.. Thus began the dramatic decline in the county's agriculture industry. In 1911 there were 3,474 farms covering an area of 364,957 acres. By 1986 that number had dropped to 383 farms on 88,479 acres.

While agriculture is not as extensive in Pictou County as it was a century ago, it still has an important role to play. Soil and climate provide an opportunity to produce a wide variety of crops and livestock for local and provincial markets.

RESOURCES

Climate

Growing Season (5°C): April 25 - Nov. 1 (190 days)

Frost Free Period (0°C):

Last Spring: May 30 - June 14

First Fall: Sept. 15 - Oct. 15

Duration: 90 - 110 days

Annual Precipitation: 1,100 - 1,300 mm

Growing Season Precipitation: 400 - 450 mm

Annual Degree Days Above 5°C: 1,700 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Pictou	Province
No. of Farms	383	4,283
Under $2,500	115	1,113
$2,500 - $4,999	55	567
$5,000 - $9,999	60	578
$10,000 - $24,999	46	641
$25,000 - $49,999	33	316
$50,000 - $99,999	30	333
$100,000 - $249,999	41	466
$250,000 & Over	3	269

Farms Classified by Major Product
(Source: 1986 Census)

	Pictou	Province
Dairy	80	698
Cattle	94	979
Hogs	9	132
Poultry	2	127
Grain	9	63
Other Crops	2	45
Fruit	21	367
Vegetables	4	90
Misc. Specialty	34	481
Mixed	13	188
Total Farms	268	3,170

Field Crop Hectares
(Source: 1986 Census)

	Pictou	Province
Wheat	178	n/a
Oats	596	5,230
Barley	543	4,823
Mixed Grain	104	n/a
Hay	6,608	68,398
Corn: (Ensilage)	134	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 288,242 hectares (ha)

Land Area of Classes 2,3,4 Soil*: 137,724 ha

Percentage of Agricultural Land to Total Land Area: 48%

1990 IN REVIEW

- 1990 would have to be looked at as a positive year for agriculture in Pictou County.
- Farm units continue to expand and modernize, mainly in the beef and dairy sectors.
- Spring weather conditions were less than ideal, but improved. There were second and some third cuts of forage. Quality was excellent.
- Dairy continues as dominant sector in county. Farmers added to fluid quota as an alternative to lower fluid payout percents and declining MSQ.
- More farmers converting their forage programs to haylage. Two custom opeators using European silage systems.
- A number of new manuare storage systems were constructed and/or upgraded.
- Beef numbers increased, mainly due to the AFDA Comprehensive Farm Development program.
- Cattle pasturing on Cape John remained stable and excellent gains were realized.
- The Pictou County Cattle Producers Association initiated a comprehensive study of the beef industry within the county.
- The largest feeder cattle operation was completely destroyed in a major fire.
- No growth in sheep sector. Industry faced with low prices and coyote problems.
- Northumberland Lamb Producers Association staged an excellent program at the Pictou-North Colchester Exhibition.
- No major developments in the hog sector and poultry remained stable.
- Fur production was almost non-existant at years end. A number of producers are equipped to expand if prices improve.
- Strawberry Producers enjoyed a modest year; blueberries produced well but low prices led to decreased net income.
- Vegetable producers experienced a positive year. Roadside markets reported a brisk business.
- Organic producers experienced a reluctance by consumers and wholesalers to pay a premium for their product.
- Early seeded grain fields suffered yield losses. There was a light crop of straw. A few producers with corn harvested a good quality feed due to the increase in heat units.
- The Pictou-North Colchester Federation of Agriculture continued to be very active. A summer works program did soil sampling throughout county.
- The Exhibition maintained attendance and experienced a break-even year.

Introducing...

Colchester County

The geography of Colchester County has played a major role in shaping much of its destiny.

The early Acadian settlers were attracted by the extensive marshes of the area, the superior quality of the uplands and the central location. Like their countrymen at Port Royal and Grand Pre, they successfully dyked and farmed the marshes and cleared the uplands. They planted wheat, barley, rye, oats, hemp, peas, cabbage and flax.

In 1755, following the expulsion of the Acadians, New England Planters of Scottish and Irish descent as well as immigrants from Ireland settled the abandoned farms. Then, at the close of the 18th century, a large wave of United Empire Loyalists swept in from the United States.

Farming remained the major occupation in Colchester County. In 1827 it was estimated that 29,135 acres were under cultivation with an estimated 8,000 acres in the Stewiacke-Brookfield area alone. A number of agriculture-related industries like grist mills and tanneries were established. By the end of the 1800's, the Town of Truro boasted a condensed milk plant, a textile and woollen mill, a soap factory, and a feed and flour mill.

Agriculture is the most important resource industry in Colchester County today. It has become more specialized and diversified, but continues to be the mainstay for much of the county. The Town of Truro has become a supply and service centre for central and north-eastern Nova Scotia.

Colchester County has the largest concentration of dairy farms in Nova Scotia and almost all crops and livestock are produced within its boundaries. Lowbush blueberries and carrots for processing have increased in acreage in recent years.

RESOURCES

Climate

Growing Season (5°C): April 24 - Nov. 1 (191 days)

Frost Free Period (0°C):

Last Spring: May 30 - June 14
First Fall: Sept. 15
Duration: 90 - 110 days

Annual Precipitation: 1,100 - 1,300 mm
Growing Season Precipitation: 400 - 450 mm
Annual Degree Days Above 5°C: 1,600 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Colchester	Province
No. of Farms	522	4,283
Under $2,500	126	1,113
$2,500 - $4,999	77	567
$5,000 - $9,999	77	578
$10,000 - $24,999	69	641
$25,000 - $49,999	38	316
$50,000 - $99,999	34	333
$100,000 - $249,999	76	466
$250,000 & Over	25	269

Farms Classified by Major Product
(Source: 1986 Census)

	Colchester	Province
Dairy	125	698
Cattle	126	979
Hogs	13	132
Poultry	4	127
Grain	10	63
Other Crops	1	45
Fruit	45	367
Vegetables	6	90
Misc. Specialty	44	481
Mixed	22	188
Total Farms	396	3,170

Field Crops Hectares
(Source: 1986 Census)

	Colchester	Province
Wheat	157	n/a
Oats	857	5,230
Barley	767	4,823
Mixed Grain	200	n/a
Hay	9,992	68,398
Corn:		
Grain	175	1,976
Ensilage	505	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 364,124 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 175,812 ha
Percentage of Agricultural Land to Total Land Area: 48%

1990 IN REVIEW

- The agricultural community in Colchester will remember 1990 as the year of major fires. These reinforced the importance of insurance to all farmers.
- Dairy barns were constructed incorporating a number of new technologies.
- The weather during growing was not typical. A long, cool spring reduced the first crop hay yields. There was severe winter kill in legumes.
- More silos constructed. Also a move to the round bale method of storing hay and haylage.
- More alfalfa fields tested positive to verticillium wilt.
- A full time weed inspector appointed for Colchester County.
- Dairy farming continues to be the backbone of the industry. Producers will have to become more aggressive in future in order to compete.
- Carrot acreage continues to expand for the Oxford Frozen Foods market. Milling wheat acreage has declined due to low prices.
- Blueberry producers had super high yields, but prices declined considerably.
- Now two suppliers of strawberry nursery plants. Main future market being targeted is Florida.
- Beef sector is stable. Many part-time producers under AFDA - Comprehensive Farm Development Plan. Several dairymen expanding their beef enterprises through the new Beef Development Program.
- The fur industry is being further scaled down. The swine numbers continue to decline; whereas sheep numbers remain constant.
- Greenhouse producers selling landscape and bedding plants had another successful year.
- Considerable new technology introduced to area through ALFI and AFDA programs.
- All extension programs organized and conducted in county are done in cooperation with producer organization, Federation of Agriculture and the Soils and Crops Association.
- Colchester is unique in that it still has four active district Federations of Agriculture. They are very involved in community projects.
- Colchester continues to be one of the major agriculture producing areas of Nova Scotia.

Introducing...

Cumberland County

Known as the "Blueberry Capital of Canada", Cumberland is the fourth largest county in the province according to gross farm sales. While the largest sectors of agriculture here are dairy and blueberries, it is also noted for its maple syrup production.

County farmers are well served by a host of service and processing outlets for blueberries, carrots, onion rings, strawberries, and maple syrup products.

Roughly triangular in shape, Cumberland County has 280 km of picturesque coastline - the Northumberland Strait area to the north, the Minas Basin to the south and Chignecto Bay to the west.

The early Acadian settlers arrived in 1605 and found a land rich with natural resources. Using dykes as their fathers had done in France, they expanded the fertile land base along the banks of the world famous high tides flowing up the Minas Basin.

Although farming was an essential factor in the economic development of the county, fishing and forestry developed more rapidly.

By the end of the 1700's, New England immigrants made up 2/3 of the population. In the 1800's Amherst and Oxford began to develop as industrial and manufacturing centres. In 1867 a woolen mill was established at Oxford.

By 1871 large scale coal mining had begun in the Springhill area, but by 1955 mineral production had decreased by 86% and numerous mine disasters made the industry no longer profitable and highly dangerous. Today the area relies on light industry and a minimum security prison.

The advent of iron ships replaced the wooden ones, ending the era of shipbuilding in Parrsboro. Farming, along with pulpwood cutting and lumbering remained the stable industry of the area.

Eastern Canada's largest greenhouses located in Oxford ship flowers throughout the Atlantic region.

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Cumberland	Province
No. of Farms	506	4,283
Under $2,500	131	1,113
$2,500 - $4,999	77	567
$5,000 - $9,999	73	578
$10,000 - $24,999	91	641
$25,000 - $49,999	37	316
$50,000 - $99,999	37	333
$100,000 - $249,999	44	466
$250,000 & Over	16	269

Farms Classified by Major Product
(Source: 1986 Census)

	Cumberland	Province
Dairy	70	698
Cattle	125	979
Hogs	9	132
Poultry	5	127
Grain	10	63
Other Crops	1	45
Fruit	84	367
Vegetables	5	90
Misc. Specialty	37	481
Mixed	29	188
Total Farms	375	3,170

Field Crops Hectares
(Source: 1986 Census)

	Cumberland	Province
Wheat	185	n/a
Oats	1,093	5,230
Barley	859	4,823
Mixed Grain	587	n/a
Hay	9,403	68,398
Potatoes	16	1,633
Corn:		
Ensilage	133	2,467

1 hectare = 2.47 acres

RESOURCES

Climate

Growing Season (5^{o}C): April 22 - Nov. 1 (193 days)
Frost Free Period (0^{o}C):
Last Spring: May 30 - June 5
First Fall: Sept. 15 - Oct. 15
Duration: 90 - 110 days
Annual Precipitation: 1,100 - 1,200 mm
Growing Season Precipitation: 400 - 450 mm
Annual Degree Days Above 5^{o}C: 1,600 - 1,800

Land & Soil

Total Land Area: 436,459 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 231,250 ha
Percentage of Agricultural Land to Total Land Area: 53%

1990 IN REVIEW

- 1990 saw several extremes in productivity. All crops were affected by weather conditions during the growing season.

- Spring was wet, summer came in very dry, fall turned wet, followed by a fairly mild and open winter.

- Cumberland has seen an increase in the number of fluid milk producers over the past decade, the only county to do so.

- The beef sector is stable despite continued marginal returns. Increased input costs has forced producers to become more efficient. Producers remain optimistic and are making use of AFDA and the new Beef Development program.

- Some beef producers are looking at using cull carrots to produce finished cattle.

- The sheep flocks continue to decline. Coyotes accounted for 153 confirmed kills in 1990. Less than 10 farms now keep sheep.

- Maple production was 14, 135 gallons. Weather was not conducive to high sap flows.

- Forage yields were down but of good quality. Grain yields varied from poor to very good. The straw yeild was down.

- Cumberland has three large egg operations and one pullet farm. In 1990, one producer installed a Moba 1500 egg grader that can process up to 17,000 eggs per hour.

- Less than 100 acres of strawberries picked in 1990, down from the 250 acres of 10 years ago. Crop suffered from heat and drought conditions.

- The blueberry crop turned out an all time record yield despite early concerns about the lack of bees for pollination. Continued interest in blueberry harvesters. Prices averaged around 40 cents per pound.

- Vegetable industry is relatively small. Drought reduced yields of fresh vegetables, whereas carrot yields were up somewhat.

- Maple production was 14,135 gallons. Weather was not conducive to high sap flows.

- Forage yields were down but of good quality. Grain yields varied from poor to very good. The straw yield was down.

- The Cumberland Federation of Agriculture has a considerable challenge ahead. Membership has dropped to 77 from 117 in 1989.

- Marilyn and Malcolm Logan, West Amherst, received the 'John VanVulpen Farm of the Year' award.

- Hog marketings increased to 10,694 animals compared to 9,083 in 1989 reversing the downward trend of past years. Most of the production is now on less than 10 farms.

- A Truro based veterinarian is now doing the Swine Herd Health calls. This has been well received by producers.

Introducing...

Halifax County

Halifax County in south central Nova Scotia is the largest county in the province with a wealth of industry including farming, manufacturing, lumbering, and fishing.

The recorded history of Halifax County began in June 1749 with the founding of the City of Halifax although trading and fishing posts had been established in the area earlier. The city was a prime location for an English military and naval base because of its central location on a peninsula and its deep ice-free harbour.

Over 2,500 people converged on the wilderness area around Halifax in 1749 to take advantage of some special inducements to attract more settlers. They were offered free transportation to the area, public financial support for a year, free arms, ammunition, and implements for clearing the land, building houses, farming and fishing. While an epidemic the first winter took a big toll on the community, the following summer the arrival of new settlers and new construction activity induced amazing progress.

Today just over one percent of the land area in Halifax County has been cleared for farming. Most of it is in the Musquodoboit Valley and Gays River area.

Both dairying and mixed farming are carried on as well as specialized enterprises, such as sod and vegetable production and considerable blueberry acreage.

The Halifax-Dartmouth metropolitan area is the most populated part of the Province and forms the largest local market for agricultural production.

Halifax Harbour, one of the world's finest, is capable of berthing ships of all sizes. Almost all Nova Scotia's exports and some from the rest of Canada are shipped through this port city.

Paved highways and a network of good secondary roads connect Halifax County with the rest of the Province. There is also a large modern airport about 40 km from Halifax at Kelly Lake.

RESOURCES

Climate

Growing Season (5°C): April 23 - Nov. 5 (196 days)

Frost Free Period (0°C):

Last Spring: May 15 - June 14
First Fall: Sept. 15 - Oct. 15
Duration: 90 - 130 days

Annual Precipitation: 1,400 - 1,450 mm Growing **Season Precipitation:** 475 - 500 mm

Annual Degree Days Above 5°C: 1,400 - 1,650

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Halifax	Province
No. of Farms	155	4,283
Under $2,500	29	1,113
$2,500 - $4,999	18	567
$5,000 - $9,999	22	578
$10,000 - $24,999	31	641
$25,000 - $49,999	12	316
$50,000 - $99,999	15	333
$100,000 - $249,999	19	466
$250,000 & Over	9	269

Farms Classified by Major Product
(Source: 1986 Census)

	Halifax	Province
Dairy	32	698
Cattle	37	979
Hogs	2	132
Poultry	3	127
Other Crops	1	45
Fruit	10	367
Vegetables	6	90
Misc. Specialty	26	481
Mixed	9	188
Total Farms	126	3,170

Field Crop Hectares
(Source: 1986 Census)

	Halifax	Province
Oats	154	5,230
Barley	84	4,823
Hay	2,768	68,398
Corn:		
Ensilage	107	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 577,251 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 84,039 ha
Percentage of Agricultural Land to Total Land Area: 15%

1990 IN REVIEW

- The major commodity of the area is dairy farming. Three producers left the industry, however, quota increased through purchases.
- The quality of home produced feed is above average resulting in increased production. Forage yields were excellent.
- Mink remained constant; Chinchilla showed an increase, fox numbers dropped and sheep remained constant.
- A local hog producer received the "Boss Hog Award" for quality from Pork Nova Scotia. His index was in excess of 110.
- Continued activity on beef farms using the Comprehensive Farm Development Program. Facilities are improving. Now two medium sized feedlots in area.
- Very little activity in poultry modernization or renovation of facilities.
- The goat milk dairy begun in 1989, was re-organized and is supplying product throughout N.S.
- Lowbush blueberries experienced above average yields, strawberries were average - increase in U-Pick.
- Hydroponically produced tomatoes and cucumbers were marketed in competition against imports.
- Cranberries were harvested commercially for the first time from a seven acre bog.
- Cabbage, cauliflower and lettuce acreages remained constant. Warm summer weather resulted in above acreage corn yields.
- Growers report continued heavy demand for quality cultivated sod.
- The Halifax County Exhibition was again very successful. Quality exhibits, excellent weather and friendly people.
- The Halifax-East Hants Federation of Agriculture organized two tours for council members of the Municipalities of Halifax and East Hants.
- The Central N.S. plowing Match was held in Elderbank.
- A workshop on communication for farm couples was held and resulted in a positive evaluation.
- Staff work very closely with Federation of Agriculture on planning all programs and activities.
- Considerable time spent on programs related to Government policies.
- Large group of young, active and optimistic farmers.

Introducing...

Hants County

Hants County is located on the western shore of Nova Scotia at the head of the Bay of Fundy. Bordering on the shores of the Avon and St. Croix rivers, it's a region of fertile land, and abundant timber.

The county can be divided into two distinct sections - the upland and the lowland plains. The ridges, valleys and irregular knolls of the lowland plain merge into the Annapolis-Cornwallis Valley on the west and extend up the Shubenacadie River Valley to the east. A well-defined escarpment rises to the south to meet the undulating, rolling hills of the upland plain.

The principal industries in Hants County are farming, lumbering and gypsum quarrying.

The county's first agricultural development began with the settlement of the Acadians in the 18th century. The early settlers erected dykes on the tidal marshes and grew wheat, barley, rye, oats, hemp, peas, cabbage and flax on the fertile soil.

After the expulsion of the Acadians 1755, the New England Planters moved in to take advantage of the opportunity for free land. Immigrants from Europe also moved in about that time.

The accessibility by land and water to Boston and other points on the Atlantic seaboard encouraged the production and export of wheat. Some areas like Falmouth developed with fruit crops.

During the War of 1812 military contracts for beef, pork and hay made grazing profitable and farmers began to neglect the tillage of the land and care of the soil. This state of affairs continued until 1818 when people in the area developed a renewed interest in agriculture. Seed and livestock were imported and agricultural societies formed.

Today mixed farming, dairying and orcharding are the principal forms of agriculture in Hants County. The area around Shubenacadie has a concentration of large dairy farms supplying milk to the Halifax market.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 1 (195 days)

Frost Free Period (0°C):

Last Spring: May 20 - May 30
First Fall: Sept. 20 - Sept. 30
Duration: 115 - 130 days

Annual Precipitation: 1,200 - 1,400 mm
Growing Season Precipitation: 425 - 475 mm
Annual Degree Days Above 5°C: 1,700 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Hants	Province
No. of Farms	398	4,283
Under $2,500	91	1,113
$2,500 - $4,999	42	567
$5,000 - $9,999	63	578
$10,000 - $24,999	62	641
$25,000 - $49,999	26	316
$50,000 - $99,999	42	333
$100,000 - $249,999	46	466
$250,000 & Over	26	269

Farms Classified by Major Product
(Source: 1986 Census)

	Hants	Province
Dairy	101	698
Cattle	113	979
Hogs	9	132
Poultry	4	127
Grain	3	63
Other Crops	0	45
Fruit	19	367
Vegetables	4	90
Misc. Specialty	41	481
Mixed	13	188
Total Farms	307	3,170

Field Crops Hectares
(Source: 1986 Census)

	Hants	Province
Wheat	140	n/a
Oats	422	5,230
Barley	339	4,823
Mixed Grain	123	n/a
Hay	9,044	68,398
Potatoes	13	1,633
Corn:		
Grain	194	1,976
Ensilage	311	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 318,142 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 187,209 ha
Percentage of Agricultural Land to Total Land Area: 59%

1990 IN REVIEW

- Dairying is still the major commodity on Hants County farms. Emphasis is being placed on producing a quality feed package. Total mixed rations systems initiated on a few farms. Major building projects being put on hold unless extremely necessary.

- Beef producers have tied into the AFDA-Comprehensive Farm Development Program. Many are increasing herd size, adding additional housing, and improving forage production.

- Management changes being made to handle early spring calving so as to increase weaning weight.

- Apple producers with quality produce have benefited from the marketing experitse of Mason's enterprise.

- There are a number of smaller vegetable producers selling through roadside stands and to wholesalers.

- Greenhouse production continues steady. There is concern over the price of oil.

- Increase vegetable production coming out of the Northfield area resettled during the past few years by the Mennonites.

- Blueberry producers experienced a good year for production. Prices are down.

- A new farm winery has been established in Falmouth.

- Poultry is still a sizeable commodity in Hants. A considerable investment has gone into new and renovated housing and modernization of equipment.

- Hants still has some good sized hog units. With low prices, expansion is not likely.

- All livestock farmers are endeavouring to improve their forage package. Round balers have become common and more are changing to haylage.

- The Hants County Federation of Agriculture and Windsor Agricultural Society are still very active in promoting the farmers needs and interests.

- Farmers are cautiously optimistic moving into the '90's.

Introducing...

Kings County

A gentle explosion of white apple blossoms lauds the birth of a new growing season each spring in Kings County. It's an event that has come to signify the agricultural wealth of Nova Scotia's fertile Annapolis Valley.

Early French explorers wrote excitedly of the area's rich soil and favourable climate. Extensive agricultural development arrived with the Acadian settlers in 1675. They dyked the tidal marshes to reclaim hundreds of acres from the sea and planted wheat, rye, and hay and established world-renowned orchards with imported fruit trees from France.

After Britain took control of the region in 1713, many of the Acadians left. The New England Planters moved in and took over the vacated farms, followed by the Loyalists after the American Revolution. The newcomers experimented with different varieties of fruit, and diversified crop production to include corn, flax and roots.

The completion of the Windsor and Annapolis Railway in 1869 opened the door to vast new markets for apple production.

Annapolis Valley producers successfully penetrated the British apple market in the 1890's. However, export markets nearly collapsed during World War II, and it took until 1973 to revive apple sales to Britain.

Kings County today produces about 50% of Nova Scotia's agricultural products. Although the area is probably best known for its apples, the pleasant climate, rich soil and sheltered location between the North and South mountains is ideal for a wide range of horticultural crops such as tree and berry fruits, vegetables, tobacco, grain corn, winter cereals, legumes and field crops for livestock feed.

Kings County's agricultural industry has strengthened its ties with the processing sector in recent years. Most of the county's manufacturing involves meat, poultry, fruit and vegetable processing.

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Kings	Province
No. of Farms	711	4,283
Under $2,500	113	1,113
$2,500 - $4,999	67	567
$5,000 - $9,999	63	578
$10,000 - $24,999	102	641
$25,000 - $49,999	66	316
$50,000 - $99,999	79	333
$100,000 - $249,999	100	466
$250,000 & Over	121	269

Farms Classified by Major Product
(Source: 1986 Census)

	Kings	Province
Dairy	69	698
Cattle	100	979
Hogs	56	132
Poultry	74	127
Grain	14	63
Other Crops	28	45
Fruit	124	367
Vegetables	41	90
Misc. Specialty	38	481
Mixed	54	188
Total Farms	598	3,170

Field Crops Hectares
(Source: 1986 Census)

	Kings	Province
Wheat	1,685	n/a
Oats	1,214	5,230
Barley	1,290	4,823
Mixed Grain	119	n/a
Hay	8,126	68,398
Potatoes	1,467	1,633
Corn:		
Grain	1,294	1,976
Ensilage	1,002	2,467

1 hectare = 2.47 acres

RESOURCES

Climate

Growing Season (5°C): Apr. 20 - Nov. 3 (197 days)
Frost Free Period (0°C):
Last Spring: May 15 - May 30
First Fall: Sept. 30
Duration: 110-130 days
Annual Precipitation: 1,200 mm - 1,400 mm
Growing Season Precipitation: 425 - 475 mm
Annual Degree Days Above 5°C: 1,600 - 1,800

Land & Soil

Total Land Area: 215,362 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 100,774 ha
Percentage of Agricultural Land to Total Land Area: 47%

1990 IN REVIEW

- Extremely variable weather conditions affected the growing season, causing reduced yield and losses in many crops.
- The dairy sector remained stable. Production continues to improve. Capital investments, other than quota is on hold.
- Much activity in beef sector. Producers using the AFDA and new Provincial Beef Development program to expand.
- Kings produced over 137,000 market hogs, down 7% from 1989; but still over 60% of N.S. marketings.
- The poultry industry is still the number one gross income producer in Kings. Three egg producers sold out and quota was decreased 3%. Broiler production increased 4.8% and turkey quota grew by 200,000 kg. Returns to all three remained good.
- Apple yields are estimated at 3.3 million bushels. There was a large percentage of pre-harvest drops. A large volume of processing apples shipped to New England. Prices continue low and the bottom line is again not promising.
- Warm weather caused the strawberries to mature at once. The season was short and prices broke early. The plant nurseries had better sales in 1990.
- Cranberries yield were good on Nova Scotia's largest plantation. However, the largest highbush blueberry plantation went into receivership. Seventy-five percent of Nova scotia honey comes from Kings.
- Vegetable producers had a very difficult year. Broccoli, lettuce, cauliflower and spinach growers sustained serious losses due to the variable weather.
- Potato yields were down 30% on average, field peas were a total loss, mostly due to extremely warm and dry weather.
- The hay and haylage crops were average and of excellent quality. Yields of cereals and grain corn were down 40-50%.
- There were record tobacco yields in 1990, averaging around 2,500 lbs./acre.
- The 1990 N.S. Farm Health and Safety award was won by Barry Lesser, a fruit grower from Aylesford.
- Kings County hosted "Crop Expo '90"; the largest undertaking of its kind in N.S.
- Kings continues to be blessed with many strong commodity and farm organizations.
- Staff are heavily involved in program commitments, production and educational meetings and courses.
- Farmers are looking forward to 1991 with guarded optimism.

Introducing ...

Annapolis County

Some of the most beautiful and prosperous land in the province can be found in Annapolis County. Nestled between the North and South mountains it forms the western portion of the Annapolis Valley. The fortunes of this fertile land have been inextricably wound with those of agriculture.

The Acadians settled around Port Royal (now known as Annapolis Royal - Canada's oldest settlement) in 1605. They cleared the land and turned vast salt water marshes into fertile farmland by draining and dyking. However, work went slowly under constant harassment by British soldiers.

When the Treaty of Utrecht handed the area over to Britain in 1713, many Acadians were forced to leave. The Planters from Massachussetts moved in, taking over some of the vacated land.

Between 1775 and 1785 the United Empire Loyalists moved in to significantly change the face of agriculture. Clearing the thick forest was hard work, but assisted by government rations, tools and land grants they were able to establish successful farming settlements. Under the influence of the Loyalists, agriculture diversified and expanded with improved techniques that increased dairy, beef, grain and fruit production.

By 1871 the county's population had swelled to nearly 18,000, opening up a substantial local market. Some light industry developed including a tannery, grist mills, a cheese factory and a cider and vinegar producer.

Today Annapolis County, with its fertile soil and pleasant climate produces a variety of agricultural products destined for markets across Canada and around the world.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 5 (199 days)

Frost Free Period (0°C):

Last Spring: May 15 - May 30
First Fall: Sept. 15 - Sept. 30
Duration: 110 - 130 days

Annual Precipitation: 1,200 - 1,400 mm
Growing Season Precipitation: 425 - 480 mm
Annual Degree Days Above 5°C: 1,600 - 1,750

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Annapolis	Province
No. of Farms	306	4,283
Under $2,500	83	1,113
$2,500 - $4,999	49	567
$5,000 - $9,999	45	578
$10,000 - $24,999	47	641
$25,000 - $49,999	19	316
$50,000 - $99,999	20	333
$100,000 - $249,999	30	466
$250,000 & Over	13	269

Farms Classified by Major Product
(Source: 1986 Census)

	Annapolis	Province
Dairy	46	698
Cattle	96	979
Hogs	9	132
Poultry	2	127
Grain	3	63
Other Crops	6	45
Fruit	24	367
Vegetables	9	90
Misc. Specialty	17	481
Mixed	11	188
Total Farms	223	3,170

Field Crops Hectares
(Source: 1986 Census)

	Annapolis	Province
Wheat	88	n/a
Oats	318	5,230
Barley	559	4,823
Mixed Grain	30	n/a
Hay	5,816	68,398
Potatoes	81	1,633
Corn:		
Grain	121	1,976
Ensilage	191	2,467

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 335,166 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 46,755 ha
Percentage of Agricultural Land to Total Land Area: 14%

1990 IN REVIEW

- Annapolis County experienced an average year to start the 90's.
- The dairy sector, which is the backbone of agriculture experienced a more stable year. Total fluid quota did not change much.
- The Soils and Crops program is producing results. This is reflected in the quality of feed in storage and milk shipments.
- Several farmers switched to haylage with mixed results. More experience will correct the mistakes made in 1990.
- Increased "custom work" was seen in '90 as a way to put up haylage. Hopefully, this will reduce costs and capital expenses on smaller farms.
- Breeders continue to improve the quality of our registered Holsteins. Several did well at large shows.
- Beef producers realize that prices aren't increasing, so are taking steps to reduce expenses.
- In order to improve their feed package, many are moving to haylage with good results.
- The Western Annapolis Valley Cattlemens' Association has been a very positive factor in the beef sector.
- Beef proucers continue to utilize the AFDA Comprehensive Farm Development program to good advantage. Facilities are being put in place at reasonable costs.
- The Federation sponsored livestock sales are doing reasonably well.
- Swine production remains largely unchanged.
- We continue to see growth in the Horticultural crop sector.
- Orchardists are looking into "high density" plantings and finding ways to reduce dependence on pesticides.
- "Peddlers" continue to market much of the fruit from Annapolis. Thus some market exists for corn and a wide range of vegetables.
- The greenhouse industry is growing steadily.
- Production of sweet corn & strawberries enjoys reasonable stability.
- Sod production, a newer commodity, has a chance for growth.
- For hay, the market is available on a mega scale. Putting the package together to get into this market is costly.
- Farmers expanding use of under-drainage.
- The Federation of Agriculture remains the key group in the county.
- Farm Women continue to be a source of pride in the county.
- The placing of a beef specialist in Western N.S. was much appreciated.

Introducing...

Lunenburg and Queens Counties

Lunenburg and Queens counties were settled by a mixture of Germans, French, and British people. Fishing villages began to spring up along the coast in the mid 1700's. Most settlement was along the shore with some agricultural communities inland.

Those early farmers faced some hard times in their new land. Clearing the virgin forest was tedious, back-breaking work. They lived in constant fear of Indian raids and were harassed by pirates and privateers along the coast.

After the American Revolution of 1775 there was a large influx of American settlers. These highly educated and wealthy people were poorly prepared for the rigors of settlement in a new and often infertile land.

Agriculture became more progressive with the prosperity of the age of wood and sail in the 1800's. Lucrative international trade patterns developed and settlement expanded further inland to the more fertile farmland.

The main occupations of the area's largely rural population today are fishing, farming and lumbering. However, recent years have seen a big change in the profile of agriculture. Small, farms have given way to more centralized, diversified operations. More people have been drawn away from agriculture, attracted by the shorter hours and better pay of work in the urban areas.

Today more than 2,800 hectares of land is used for agriculture in Lunenburg-Queens. Hay is one of the most significant field crops followed by barley, oats, potatoes and corn. The region also boasts a number of highly productive dairy, poultry and beef farms.

Lunenburg County is considered the "Christmas Tree Capital of Canada" with a large export market in the USA.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 5 (199 days)

Frost Free Period (0°C):

Last Spring: May 15 - May 30
First Fall: Sept. 15 - Oct. 15
Duration: 110 - 150 days

Annual Precipitation: 1,400 - 1,450 mm

Growing Season Precipitation: 475 - 500 mm

Annual Degree Days Above 5°C: 1,400 - 1,800

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Lunenburg	Queens	Province
No. of Farms	305	35	4,283
Under $2,500	126	15	1,113
$2,500 - $4,999	41	7	567
$5,000 - $9,999	43	2	578
$10,000 - $24,999	39	8	641
$25,000 - $49,999	15	1	316
$50,000 - $99,999	14	1	333
$100,000 - $249,999	20	0	466
$250,000 & Over	7	1	269

Farms Classified by Major Product
(Source: 1986 Census)

	Lunenburg	Queens	Province
Dairy	33	1	698
Cattle	77	12	979
Hogs	9	1	132
Poultry	13	1	127
Grain	2	0	63
Other Crops	0	0	45
Fruit	8	1	367
Vegetables*	3	0	90
Misc. Specialty	28	2	481
Mixed	6	2	188
Total Farms	179	20	3,170

Field Crops Acreage
(Source: 1986 Census)

	Lunenburg	Queens	Province
Oats	124	14	5,230
Barley	37	0	4,823
Hay	3,114	241	68,398
Potatoes	5	0	1,633
Corn:			
Ensilage	43	0	2,467

1 hectare = 2.47 acres

Land & Soil

	Lunenburg	Queens	Total
Total Land Area (ha) [1]	315,027	269,941	584,968
Classes 2,3,4 Soil (ha) [2]*	36,156	4,742	40,898
Percentage of [2] to [1]	11.5%	2%	7%

1990 IN REVIEW

- The variable weather throughout growing season caused difficulties with most all crops.
- Spring planting delayed until June. Light first crop of hay, good second crop. Open fall allowed cattle to pasture into November.
- Blueberry crop very good. Horticulture crop varied in yields. Fruit & berry crop yields were average.
- Though returns in some commodities were down, many farmers continued to make capital improvements.
- Agriculture, the environment and related problems, are becomming a major issue. A high percentage of farm land in region is coastal and has a high development value.
- Labour is becoming hard to find.
- Many farms located on gravel roads. Transportationn is a problem at certain times of year.
- Areas first weed inspector appointed (Sarah Pelley). Work expanded in 1990.
- More stress in future extension programs will be on agricultural awareness.
- Maintained production levels with 22 fluid milk and 12 cream shippers.
- Poultry and egg commodities remain strong and viable on South Shore due to supply management.
- Many small beef herds. Most part-time and expanding. Must watch investment limits and become mroe aware of market prices.
- Greenhouse & horticultural crops are expanding. A viable commodity to-date. Still some market potential in area.
- Hog producers have gone through some rough times. Some producers again considering expansion.
- Some renewed interest in sheep. Coyotes still a problem. Fur industry has cut production due to low returns.
- Lunenburg Federation of agriculture continues strong and united. Queens has disbanded and members joined with Lunenburg.
- Feeder sales offered good cattle with strong prices.
- Soils and Crops Improvement Association provided soil testing service, forage competition and variety trials.
- Area continues to make considerable use of Department programs, especially the AFDA-Comprehensive Farm Development programs.

Introducing...

Digby County

Fishing boats roll in the swell just off the coast. Huge stretches of timberland are broken by fields of grass and hay. A network of lively streams and lakes winds through the stoney surface of the land. This is Digby County, tucked between Yarmouth County in the south, Annapolis County to the east and the Bay of Fundy to the west.

The county was settled mainly by New England Loyalists and French Acadians who returned to Nova Scotia after the Expulsion of 1755. Since the beginning, people's lives in Digby have been tied to the sea, the land and the woods.

Most of the people in Digby County live off fishing, farming and lumbering within a coastal strip five to ten miles wide along the shores of St. Mary's Bay and Digby Neck.

Known as the "Fur Capital of Canada", Digby ranchers produce some of the best quality fox and mink fur pelts in the world.

About 75% of Nova Scotia's mink production takes place in Digby County. Local fish plants have provided a source of feed for the mink, and a suitable climate help make it one of the major mink producing areas in Canada.

The chief crops grown in the County are hay and grass. Some acreage is planted in grain, fruit and vegetable crops. Digby has also traditionally produced top quality pork.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 11 (205 days)

Frost Free Period (0°C):

Last Spring: May 15 - May 30
First Fall: Sept. 15 - Oct. 15
Duration: 110 - 150 days

Annual Precipitation: 1,200 - 1,400 mm
Growing Season Precipitation: 450 - 500 mm
Annual Degree Days Above 5°C: 1,600 - 1,700

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Digby	Province
No. of Farms	167	4,283
Under $2,500	42	1,113
$2,500 - $4,999	23	567
$5,000 - $9,999	18	578
$10,000 - $24,999	31	641
$25,000 - $49,999	13	316
$50,000 - $99,999	4	333
$100,000 - $249,999	15	466
$250,000 & Over	21	269

Farms Classified by Major Product
(Source: 1986 Census)

	Digby	Province
Dairy	1	698
Cattle	23	979
Hogs	9	132
Poultry	6	127
Grain	4	63
Other Crops	2	45
Fruit	2	367
Misc. Specialty	75	481
Mixed	3	188
Total Farms	125	3,170

Field Crop Hectares
(Source: 1986 Census)

	Digby	Province
Barley	24	4,823
Hay	693	68,398
Potatoes	14	1,633

1 hectare = 2.47 acres

Land & Soil

Total Land Area: 271,553 hectares (ha)
Land Area of Classes 2,3,4 Soil*: 64,362 ha
Percentage of Agricultural Land to Total Land Area: 24%

1990 IN REVIEW

- Mink, fox, hog, beef and horticulture crops comprise much of the agriculture production in Digby County.

- During 1990 low fur prices continued to exert negative pressures on mink and fox producers. Returns are well below the cost of production.

- Two special assistance payments in February and September of 1990 were vital to slowing down the exodus from the industry.

- Over the past two years it is estimated that 65 percent of the foxes in Digby have been pelted.

- Mink producers have also reduced numbers through heavy culling; however, many are hopeful that prices in this commodity will improve.

- Beef cattle numbers continued to stabilize in 1990.

- Plans are underway to visit all beef producers with the new beef specialist, and to explore the idea of forming an area Cattlemen's Association.

- Hog production is now limited to six producers; however, one producer has four farms, his and three former producers.

- The winter of 1989 caused considerable winter kill to strawberry plantings. Replacement plantings were made in 1990.

- The highbush blueberry plants continue to suffer from the severe winter kill problems of a few years ago. No new acreage is coming on stream.

- The Clair Livestock Health Services Board was formed in 1990.

- The Soil and Crop Improvement Association has become a committee of the Digby County Federation of Agriculture.

- Several very successful short courses and events were held: for example:

  - N.S. Live Mink Show - 150 participated.

  - S.W. Nova Fox Producers - mini conference - 45 attended.

  - Beef Producers Meeting - 20 attended.

  - Farm Women's Day - 35 attended.

  - Hog Producers tour to Ontario.

- Along with the low prices being experienced in most commodities, Digby farmers are at a disadvantage due to distance from major markets and a lack of supply and service outlets.

Introducing...

Yarmouth County and Shelburne County

Yarmouth and Shelburne Counties are located at the south-western tip of the province which has some of Nova Scotia's most rugged coastline.

However further inland, pockets of surprisingly productive farmland flourish in spite of the topography.

For more than 200 years farmers have worked the land here - undaunted by the less than ideal soil. Using hard work and the right management techniques, they've pushed aside the stones to grow a wide range of crops.

The area was originally settled by the French early in the 17th Century, scattered by the Expulsion of the Acadians in 1755. Many, however, returned to live in fishing villages along the coast. English Loyalists moved into Yarmouth/Shelburne after the Expulsion.

While most of the early villages sprung up along the shore to take advantage of the lucrative fishing and ship building opportunities, some people moved inland to take up lumbering and farming.

The agricultural industry has gone through a period of decline, but in recent years there has been a stabilization, and in some cases a growth in agricultural activity.

Full time operators have grown to a size where they can be fully competitive with their counterparts elsewhere in the province. The smaller farmers work part-time, adjusting to produce commodities for which there is a ready market. Much of what is produced in the region is consumed locally.

RESOURCES

Climate

Growing Season (5°C): April 20 - Nov. 10 (204 days)

Frost Free Period (0°C):

Last Spring: April 30 - May 30
First Fall: Sept. 15 - Oct. 30
Duration: 110 - 170 days

Annual Precipitation: 1,200 - 1,400 mm
Growing Season Precipitation: 450 - 500 mm
Annual Degree Days Above 5°C: 1,400 - 1,700

FARM PRODUCTION

Farms Classified By Sales
(Source: 1986 Census)

	Yarmouth	Shelburne	Province
No. of Farms	134	22	4,283
Under $2,500	54	4	1,113
$2,500 - $4,999	20	4	567
$5,000 - $9,999	14	8	578
$10,000 - $24,999	15	4	641
$25,000 - $49,999	9	1	316
$50,000 - $99,999	11	0	333
$100,000 - $249,999	8	1	466
$250,000 & Over	3	0	269

Farms Classified by Major Product
(Source: 1986 Census)

	Yarmouth	Shelburne	Province
Dairy	17	1	698
Cattle	15	0	979
Fruit	1	4	367
Vegetables	3	0	90
Misc. Specialty	38	12	481
Mixed	6	1	188
Total Farms	80	18	3,170

Field Crops Hectares
(Source: 1986 Census)

	Yarmouth	Shelburne	Province
Hay	723	n/a	68,398
Potatoes	1	0	1,633

1 hectare = 2.47 acres

Land & Soil

	Yarmouth	Shelburne	Total
Total Land Area (ha) [1]	275,639	185,054	460,693
Classes 2,3,4 Soil (ha) [2]*	50,427	1,508	51,935
Percentage of [2] to [1]	18%	1%	11%

1990 IN REVIEW

- Though not large, agriculture continues to make a positive contribution to the economy of the Yarmouth-Shelburne areas; with estimated gross sales of $4.5 million.

- Dairying is still the backbone of the industry, but continues to shrink. The area lost 1,250 litres of quota and are down to eleven fluid producers, all shipping to Cook's Dairy.

- Milk is being brought into the area to meet market needs. Those left are still investing in capital projects. Their producer association is very active.

- Eight of the eleven herds are on ADLIC. The four herds on official test average 167-154-169 BCA.

- Sheep producers estimate over 2,000 ewes grazing on off-shore islands. Early snows and cold, wet spring reduced lambing to .8 lambs per ewe. There was some mortality in older ewes.

- A project was initiated by one producer to move market lambs from these islands to the mainland. Using a small cage suspended on a wire cable proved workable.

- Members of Western Nova Blueberry Co-op shipped 175,000 pounds of product to COBI during August. Fields are small, but yield potential is excellent. A limiting factor is the rough terrain. The co-op's executive is a dynamic group interested in fostering continued growth.

- Both fox and mink producers experienced very difficult times in 1990. With well below cost prices many pelted down or pelted out.

- Only 3,600 fox pelts were shipped in 1990. Seven mink ranchers produced 21,000 pelts. This group has stabilized and expects to increase numbers slowly.

- Yarmouth produced 35 acres of fresh vegetables. Weather reduced expected yields. Work continues on improving access to local markets.

- The Yarmouth County Federation meets on a monthly basis. The 50 members are very active in co-ordinating farm related short courses and projects.

- The Yarmouth Agricultural Society, South West Nova Fox Breeders and Yarmouth County Milk Producers continue to actively represent their membership.

- Our staff continues to work very closely with all groups.

1990
4-H SECTION
ANNUAL
REPORT

FOR THE YEAR ENDING : DECEMBER 31, 1990

SUBMITTED BY : ELIZABETH CROUSE,
P.A.G. 4-H SUPERVISOR

4-H AND RURAL YOUTH ANNUAL REPORT

1990

Two new programs were held in 1990. The first Atlantic Eastern Breeders Incorporated Future Dairymen's Conference was hosted by Nova Scotia 4-H staff in July. The 4-H members from all the Atlantic Provinces brought their own calves to the N.S. Provincial Exhibition Grounds for the three days of intense instruction. This program was initiated by Eastern Breeders Incorporated Atlantic (EBI) and sponsored by EBI and Agricultural Canada. It received an excellent rating from participants.

The second program was the hosting of the week long Canadian 4-H Council Annual Meetings. These meetings gave Nova Scotia 4-H a chance to present their 4-H program to leaders, corporate directors, and staff from across Canada.

The Focus on 4-H theme was prominent at all events.

STATISTICS:

4-H membership rose slightly by 111 members. Adult leaders also increased by 22. Project completion lowered slightly to 85%. It was interesting to note an increase in the horticulture projects as well livestock numbers maintained '89 levels. See table one and two for details. The 4-H Office's audio visual lending library processed approximately 300 orders in 1990.

NOVA SCOTIA 4-H COUNCIL:

The Nova Scotia 4-H Council met as an executive in January, March, May, July, and October. The Annual Meeting was held in November. It featured two special sessions; one a fund raising proposal and one on the G.S.T.

The Nova Scotia 4-H Council Executive for 1990 were:

PRESIDENT:	Hob MacLeod, Cape Breton Co.
1ST VICE-PRESIDENT:	Bev Patterson, Hants Co.
2ND VICE-PRESIDENT:	Judy Wile, Lunenburg Co.
PAST PRESIDENT:	Faye Moore, Cumberland Co.
TREASURER:	Elizabeth Crouse, 4-H Supervisor
HANTS/KINGS DIRECTOR:	Jean Brown, Hants Co.
CAPE BRETON DIRECTOR:	Eileen Whalen, Cape Breton Co.
SOUTH SHORE DIRECTOR:	Mary Frail, Queens Co.
CENTRAL DIRECTOR:	George Dickie, Colchester Co.
EASTERN DIRECTOR:	Marlene MacMillan, Antigonish Co.
WESTERN DIRECTOR:	Ann Marie Pearle, Annapolis Co.

ATLANTIC DIRECTOR:	Sisca Bekkers, Antigonish Co.
CANADIAN 4-H COUNCIL:	Mary Magee, Kings Co.
4-H HOST:	Stephen Phinney, Annapolis Co.
4-H HOSTESS:	Nova Dawn Brewer, Lunenburg Co.
STAFF ADVISOR:	Susan Horne, Home Economics Supervisor
RURAL BEAUTIFICATION:	Marlene MacMillan, Antigonish Co.

The council continues to mature and is responsible for the sale of 4-H supplies for promotion.

NOVA SCOTIA 4-H WEEKEND:

The 1990 4-H Weekend was held May 11-13 in Truro.

The winners of the competitions were:

Senior Public Speaking:	Jenny Johnson, Annapolis Co.
Intermediate Public Speaking:	Regan Chapman, Cumberland Co.
Junior Public Speaking:	Amy Dowe, Pictou Co.
Top Junior Introducer:	Beau Blois, Hants Co.
Top Junior Thanker:	Sheri Barkhouse, Halifax Co.
Junior Single Demonstration:	Willy King, Yarmouth Co.
Senior Single Demonstration:	Tracey Shinners, Cape Breton Co.
Overall Single Demonstration:	Tracey Shinners, Cape Breton Co.
Senior Team Demonstration:	Peter Floris, Annapolis Co. Ricky Mosher, Annapolis Co.
Junior Team Demonstration:	Marie Haynes, Cumberland Co. Shauna Kierstead, Cumberland Co.
Junior 4-H Poster:	Nancy MacKay, Colchester Co.
Senior 4-H Poster:	Corey Fraser, Pictou Co.
Junior 4-H Decal:	Jennifer Grant, Colchester Co.
Senior 4-H Decal:	Denise MacDonald, Colchester Co.
Top Woodsman Team:	Kings County
4-H Host:	Stephen Phinney, Annapolis Co.
4-H Hostess:	Nova Dawn Brewer, Lunenburg Co.
Top Junior Modern Square Dance Team:	Lower South River 4-H Club, Antigonish Co.
Top Senior Modern Square Dance Team: (Prepared Dance)	Loch Clover 4-H Club, Antigonish Co.
Top Senior Modern Square Dance Team: (Compulsory Calls)	Loch Clover 4-H Club, Antigonish Co.
Top Junior Old Time Dance Team:	Loch Clover 4-H Club, Antigonish Co.
Top Senior Old Time Dance Team: (Prepared Dance)	S.B.I. 4-H Club, Pictou Co.
Top Senior Old Time Dance Team: (Compulsory Calls)	S.B.I. 4-H Club, Pictou Co.

National 4-H Travel Awards were also presented at 4-H Weekend. The following were the selections:

National 4-H Conference, Washington, D.C. (March 29-April 9):

Lisa Scott, Pictou Co.

Dairy Conference, Madison, Wisconsin (October):

Color Breeds:	Gillian Greenough, Hants Co.
Holstein:	Scott Masters, Colchester Co.

United Kingdom 4-H Exchange (June 5 - July 23):

Mary Ann Oulton, Hants Co.

National 4-H Members' Conference (November 6-11):

1. Jackie Beaton, Antigonish Co.
2. Dawn Barrington, Cape Breton Co.
3. Craig Cook, Lunenburg Co.
4. Alan Langille, Pictou Co.
5. Teresa Campbell, Hants Co.
6. Krystal Hirtle, Lunenburg Co.

Citizenship Seminar, Ottawa (March 24-April 1):

1. Angela Patterson, Hants Co.
2. David Jackson, Annapolis Co.
3. Angela MacKenzie, Pictou Co.
4. Brendon Hemens, Antigonish Co.
5. Jason Tilley, Halifax Co.
6. Patty MacKay, Colchester Co.

Career Conference, Winnipeg (March 24-April 1):

1. Peter Giffen, Colchester Co.
2. Sandra Scott, Pictou Co.

Interprovincial 4-H Exchange (July 4-18):

British Columbia	- Jeff Scothorn, Pictou Co.
Alberta	- Pam Wile, Lunenburg Co.
Manitoba	- Chris Dowe, Cumberland Co.
Quebec	- Aimee MacLean, Annapolis Co.
Prince Edward Island	- Wanda Robbins, Digby Co.

Nova Scotia 4-H Council Scholarship:

Gwen Patterson, Kings Co.

Canadian National Exhibition Scholarship (Aug. 29-Sept. 12):

Teresa Campbell, Hants Co.

Petro-Canada Youth Leadership Awards:

Lisa Scott, Pictou Co.
Genevieve Harvey, Hants Co.

LEADER TRAVEL OPPORTUNITIES:

Manitoba 4-H Conference:

Mary Frail, Queens Co.

Scotiabank Hays Classic Chaperon:

Colleen Eikelenboom, Colchester Co.

National 4-H Leaders Conference (November):

1. Andrew Hanaham, Victoria Co.
2. Edna Foster, Cumberland Co.
3. Dot McNutt, Colchester Co.
4. Bonnie Jean Acker, Annapolis Co.

LEONARD BEST MEMORIAL AWARD (HOST & HOSTESS):

1. Stephen Phinney, Annapolis Co.
2. Nova Dawn Brewer, Lunenburg Co.

NOVA SCOTIA 4-H SHOW:

The 13th Annual 4-H show was held at the Nova Scotia Provincial Exhibition Grounds in Truro. The show was hosted by the three counties in Central Region. The attendance doubled at this show over 1989's making it an outstanding 4-H promotion.

The Provincial 4-H Show Committee consisted of:

Co-Chairmen	- George Dickie, Colchester Co.
	- Faye Moore, Cumberland Co.
Secretary	- Elaine Maxner, Hants Co.
Members	- Bev Patterson, Hants Co.
	- Edna Langille, Pictou Co.
	- Pat Whidden, Halifax Co.
	- Georgie Laidlaw, Colchester Co.
Staff Advisors	- Susan Home, Home Economics Supervisor
	- Bill MacLeod, 4-H Representative, Central Region
	- Elizabeth Crouse, Provincial 4-H Supervisor

Colchester East Hants once again won the flag for overall county.

Thanks to the Farm Credit Corporation, who developed the 4-H computer program, all the calculations for the overall county award were done by computer.

The **Market Steer and Lamb Show 'N' Sale** was again held at this year show. Twenty-one lambs and twenty-four steers were shown in 1990.

The Grand Champion Lamb was owned by Wayne Oulton of Windsor. Owen Davis Trucking paid $10.25/lb, a sale record.

The Grand Champion Steer was shown by Andrea Palmer of Windsor. This steer was also purchased by Owen Davis Trucking of Windsor and sold for $2/lb.

The 21 lambs averaged $2.37/lb ($2.65 in 1989, $2.59 in 1988, $2.72 in 1987, and $1.74 in 1986).

The 20 steers sold for an average of $1.30/lb ($1.70 in 1989, $1.62 in 1988, $1.65 in 1987, and $1.21 in 1986). One steer and one lamb were culled.

Advertisements were placed in the Farm Focus, The Amherst Citizen, Truro Daily News, Kentville Advertiser, Antigonish Casket, and the Hants Journal.

This year's committee was chaired by George Lacey of the N.S. Cattlemen's Association. They worked long and hard to ensure the Show 'N' Sale was a high quality one. Committee members included:

Jim Neary, Treasurer
Elizabeth Crouse, Secretary
Gary Burley
Buddy MacDougall
Jim Ripley
Allan Palmer
Wallace MacKay
Tom Nunn
Anthony van Oostrum

Frank Berkelaar once again volunteered his auctioneering services.

4-H STAFF:

A number of changes occurred in the 4-H staff in 1990. As of December the following were the 4-H Staff:

Provincial 4-H Supervisor - Elizabeth Crouse
Provincial 4-H Secretary - Michelle van Oirschot

Regional Offices:

Cape Breton - Alan Porter, Sydney
- Cheryl Butts MacMillan, Mabou
Eastern - Jeff Wentzell, Pictou
Valley - Ruth Withrow, Windsor
Central - Bill MacLeod, Truro
South Shore - Lynn Thurber, Bridgewater
Western - Marianne Ward, Lawrencetown
- Barb Headdy, 4-H Secretary, Part Time

Since last year's report, Weldon Smith, Central Region, was reassigned to the Agricultural Representative Services. His position was filled by Bill MacLeod's transfer to Truro. Don Butler resigned as Cape Breton 4-H Representative and was replaced by Alan Porter. Joanne Beaton resigned from her position in

Lawrencetown and was temporarily replaced by Danny Gilfoy until Marianne Ward's appointment.

Julie Landry and Sonya Doyle worked as part time 4-H Secretaries under a special Civil Service Handicapped Program during the year.

I want to say a special thank you to all the 4-H Staff. Their enthusiasm, dedication, and even sense of adventure are a joy to work with. Thanks for as well to the Home Economists for their part in the 4-H program.

4-H SUMMER STAFF:

The 4-H Summer Students are a tremendous asset to the program. They too were a special group with a wide range of skills.

The Summer Students were:	Mabou	- Marina Gough
	Antigonish	- Rhonda MacDougall
	Truro	- Susan Simpson
	Nappan	- Andrea Doucette
	Windsor	- Elaine Ells
	Yarmouth	- Aaron Sweeney

ATLANTIC 4-H COMMITTEE:

This committee met twice in 1990. Nova Scotia was represented by the 4-H Supervisor and Ruth Withrow as well as the Nova Scotia 4-H Council's delegate, Sisca Bekkers. Nova Scotia hosted the Interprovincial Exchange Send Off as well as the Eastern Breeders Incorporated Atlantic Future Dairymen's Event on behalf of this committee.

CAMP RANKIN:

Four weeks of Junior Camp and one week of Intermediate Camp comprised the camping season.

Camp staff were:

Director	- Jon Davison
Assistant Director	- Jill Eaton
Cook	- Marilyn McKay
Assistant Cook	- Jillian Hollis

COUNSELLORS:

4-H	- Catherine Buchanan
Water Safety	- Tracey Sampson

Drams & Arts	- Trina Hall
Craft	- Dawn Barrington
Recreation	- Rodney Doyle
Nature Study	- Buddy Burgess
Canoeing	- Nathan Sampson

4-H members in the Counsellor-In-Training Program were a part of all camps. This program identifies potential counsellors.

4-H STAFF TRAINING:

4-H staff continues to avail themselves of many opportunities for training. Staff represented Nova Scotia on Atlantic 4-H Committee, chaperoned and attended three National and Atlantic Program Events, and participated fully in Canadian 4-H Council Meetings. Staff also organized project information sessions at staff meetings.

PROVINCIAL PROGRAMS:

Other programs held provincially and not mentioned previously include:

Atlantic 4-H Leaders Conference - held in Prince Edward Island. Twelve 4-H leaders attended from Nova Scotia. Each of them prepared and presented a program here in Nova Scotia upon their return.

Provincial Square Dance Meeting - these leaders and others interested in the square dance competition met provincially to revise the rules and the program.

Provincial Horse Leader Meeting - Horse project leaders met to discuss their project and to revise the 4-H Horse Standards Guide.

OTHER:

Regionally 4-H Representatives planned and carried out many events. These included a Western Region Chat-A-Rama for intermediate members, a Regional Workshop for Volunteer Leaders called "Come West" in Yarmouth, a Regional Leaders and Members Workshop for Cape Breton called "If It Is To Be It's Up To Me," Eastern Region held a ski day and a Public Speaking and Demonstration Workshop. In Central Region, Camp Clover Conjunction, a senior members camp, was held. Leaders attended a workshop entitled "Making Your Best Better." The Marilyn Naugler Craft Workshop is held annually in the South Shore.

IN CONCLUSION:

4-H is well equipped to fill the challenges of the next year. Not only are the 4-H staff enthusiastic and competent but are strongly supported by the Home Ec Staff. Many other branches of the Department help out at workshops, clinics, and with project specifics. I especially want to thank Susan Horne for her help and wisdom over the past year. Also to Michelle van Oirschot for the capable and amicable way she performs her duties. To Bob Bennett and Dave Sangster, I appreciate your direction over the past year.

I look forward to 1991 and a strong 4-H program in Rural Nova Scotia.

Respectfully submitted,

Elizabeth Crouse, P.Ag.
4-H Supervisor

EC/mvo

ANNAL REPORT

1990

HOME ECONOMICS

SECTION

FOREWORD

The Annual Report of the Home Economists Section consists of six (VI) sections.

Sections I-VI contain statistical tables which include: (I) Performance Indicators, (II) Food and Education and Agricultural Awareness, (III) Women's Institutes, (IV) 4-H, (V) Farm and Agricultural Related Activities, (VI) Other Activities, and Closing.

This report is designed to provide the reader with a view of the Home Economics Section program and at the same time, develop an appreciation of the nature and scope of the Sections activities.

The staff who coordinate the Home Economics Extension Program are:

Colleen MacNeil	Regional Home Economist	Antigonish Office Antigonish, Pictou Guysborough
Gail Keddy	Regional Home Economist	Truro Office Cumberland, Colchester, Halifax, East Hants
Cheryl Butts-MacMillan	Regional Home Economist	Mabou Office Victoria, Inverness
Jane Lewis	Regional Home Economist	Sydney Office Cape Breton, Richmond
Valorie MacKinnon	Regional Home Economist	Bridgewater Office, Lunenburg, Queens, Shelburne, Yarmouth
Marjorie Knowles	Regional Home Economist	Kentville Office, Hants, Kings, Annapolis, Digby
Susan Horne	Supervisor, Home Economics	Truro Office

OTHER: Susan Waringer, Deborah Matheson - Challenge Employment and Provincial Employment Positions shared between 4-H and Home Economics Sections. Julia Landry, Sonja Doyle - Civil Service Disabled Training Project Workers.

The **Home Economics Section** is responsible for (Key Result areas):

l) Food Education:

a) coordinating a food education program using Nova Scotia foods,

b) conducting food education programs using Nova Scotia foods,

c) providing technical information and management advice of food buying, handling, preparation and storage.

2) Agricultural Awareness:

a) providing local coordination of agricultural awareness programs,

b) conducting agricultural awareness programs and activities.

3) Rural Organizations:

a) providing leadership to rural organizations,

b) facilitating group, personal and skill development in rural organizations.

4) Resources:

a) develop resource materials, training packages and courses.

These key result areas provide the working framework in the output expected from the Home Economics Section. The work of the Section is carried out by county, regional and on a provincial basis by the seven staff. Each Regional Home Economist develops a regional work plan appreciative to the needs of the local area. Over the last year and in the upcoming years, more emphasis has been and will be placed in the Agricultural Awareness area.

SECTION 1 **PERFORMANCE INDICATORS**

January 1 - December 31, 1990

INDICATOR	W.I.	4-H	FARM	PROFESSIONAL	OTHER	YEARLY TOTAL	PREVIOUS YEAR
# of calls on clients	45	190	25	80	93	433	330
# of office calls	76	303	42	89	268	778	842
# of meetings, short courses, programs, displays, etc. attended	117	476	204	500	240	1537	1120
Attendance at meetings, short courses & programs	4061	23673	8943	3416	4901	44994	41041
# of mass meetings, programs, displays, etc.	1	19	17	3	7	47	139
Attendance	3000	53620	44199	650	12390	113859	146730

4170 (2770) Information Requests

1244 (983) Radio & T.V. Broadcasts

8589 (7903) Letters Written

852 (868) Newspaper Articles or Releases

27252 (39991) Publications & Circulars Distributed

NOTE: Brackets are for last year's figures.

ANALYSIS: The performance indicators are recorded on a monthly basis and are the same throughout the Extension Branch.

Reviewing these indicators, there are some dramatic changes, whereas others have remained very constant.

Client calls and office calls are typical of past years. Client calls are up; office calls are down.

There has been a very dramatic increase in the number of meetings and programs as well as attendance at those. This increase is in all the client areas except "other" where there is a significant decrease. 4-H represents almost 50% of the total attendance and 30% of the actual number of meetings, workshops coordinated. The dramatic shift shows up in a move from working with the "other" client group to an increase in 4-H. This trend was not predicted. The predictions were for an increased farm contact and an increase in "other". As the section increases its work in agricultural awareness school contacts are part of the other category.

The section provides a one to one service to answer consumer questions. These are usually on food safety, food preservation, food handling and preparation methods. Many of these can be handled quickly but some require research time, however, our clients are very responsive to this service available to them. The amount of time required to respond to their request varies on the complexity of the request or the availability of staff. Calls increased by 150% this year which is significant.

The media continues to be available to the Home Economics Section. Cable T.V. - although does not have a huge audience, has a consistent following. Cable has enabled Home Economists to provide a food education program to additional areas of their region that otherwise they would not necessarily be able to get to. To increase the number of radio and T.V. broadcasts by 126% at a time when many other groups are lobbying for free media opportunities speaks well of the broadcasts the staff are doing. This has been an increase for two years in a row.

Newspaper articles and press releases are developed to promote specific programs and educate consumers about using Nova Scotia products. The number is down very slightly over last year and at this point is not anything to worry about.

Publications distributed show a decrease this year. Normally, a decline in this was anticipated because of reduced printing dollars and commodities having money to develop and print materials and the section's materials needing staff time and resources to update them.

It is important to note who our clients are and what percent they reflect the overall total client group, W.I. - 9.02% (8.0), 4-H - 52.6% (36), Farm - 19.8% (21), Professional - 7.5% (6), and Other - 10.8% (24).

SECTION II FOOD EDUCATION/AGRICULTURAL AWARENESS

DEMONSTRATIONS & PRESENTATIONS

	NUMBER OF	GROUP IF APPLICABLE
1) Food Buying, Budgeting	11	Employment retraining, low income councillors, consumers, school class.
2) Food Preparation Basics	18	WINS, consumer groups, home & school, classes, church, senior citizens.
3) Food Preservation	1	Consumers.
4) N.S. Food Product Education	20	Home & school, consumers, church groups, W.I., school classes, foreign students.
5) OTHERS: Nutrition Month, Snacks, Meal Planning, Diet/Cancer, Healthy Eating	10	Low income, students, Home & School, seniors, school classes.

EXHIBITS, DISPLAYS, SHOWS

THEME	DURATION	SPONSOR
Nutrition Month - Mall Display	6 hrs.	Home Ec./Dept. of Health
Taste of Yarmouth (Exhibition)	5 hrs.	Dept./Federation
Atlantic Winter Fair	4 days	Dept./Ag. Awareness Comm/Milk N.S.
Meat Month	2 days	Milk Producers, A.W.F., Home Ec Section
Summer Vegetables	1 day	Home Ec Section/VPPA
Preserve The Right Way	2 days	Home Ec Section
Know Your Apples	2 days	Home Ec Section
Ways with N.S. Potatoes	½ day	Home Ec Section
Grocery Store Tour (Nutrition Month)	1 day	Home Ec/Nutrition Month Committee
Food Test -Ag Awareness Display	2 days	NSDAM/Federation
Heritage Day - Fall Vegetables	3 days	Home Ec Section
McDonaldland Mini Farm	8 days	NSDAM & McDonalds
NSDAM Exhibition Booth	8 days	NSDAM
Country Farm Jamboree Puppet Show	12 days (36 performances	Home Ec/Enterprise Cape Breton

WORKSHOPS AND/OR SHORT COURSES

	NUMBER OF	GROUP IF APPLICABLE
Garnishing with N.S. Goodness	3	Staff/WINS
Wok Cooking	1	General Public
N.S. Vegetables with A Difference	2	Consumers
N.S. Agriculture Foods in the Microwave	4	Church Group
Taste of N.S. Restaurant Workshops	5	Restauranteurs

SPECIAL PROJECTS (What, For Whom)

	AMOUNT OF TIME	PURPOSE
Taping Cable Shows	½ day/mo.	Food Ed/Promotion
Pork Perfect Promotion	3 days	Meat Month Promotion
Gravenstein Apple Promotion-Toronto	2 days	Promotion Apple Shipment
Gravenstein In-Store Program	1 day	Fruit Growers
Apple Pie Contest-Brochure, Fridge, Rules	5 hrs.	Special Event-Port Hawkesbury
N.S. Gifts From Your Kitchen	3 days	General Food Promo & Education
Nutrition Month-Cooking For Seniors Cake Special	1 hr.	Home Ec/Dept. Health/Able Cable
Garden Guide Series	2 days	Education

RESEARCH & PROGRAM DEVELOPMENT

	AMOUNT OF TIME	PURPOSE
Taste of N.S. Recipe Testing & Development & Editing	13 days	Taste Recipe Pkg. for programs binder
Radio Scripts-Development & Recording	1 day/mo	Food Education/Ag Awareness
Planning/Recipe Testing for Cable	1½ days/mo	Promotion of N.S. product
Research & Development of Agri Focus Releases	2 days	Educational/Awareness
Food Products & Nutrition Project	½ day	Education Awareness
Meat Cable Show	1 day	Educational
Inverness Ag. Awareness Kit Revision	10 hrs.	For Grade 6 Curriculum
5 Year Planning-Ag. Awareness	2 days	Ag. Awareness Direction (Home Ec)
McDonaldland and Puppet Show Preparation	10 days	Awareness Projects

OTHER

	AMOUNT OF TIME	PURPOSE
Baking Competition Judging	3	Judge
Commodity Board Meeting	2	Co-ordination/communication
Farm Tour for Saskatchewan 4-H	3 hrs.	Education of Inverness Agriculture
Video Productions - Food Fabulous	3 videos	Awareness/Education/Promote Concept
McDonaldland, Country Farm Jamboree, Agricultural Awareness Meetings & Sub-Committee	14	
Food Safety Proposal(s)	2 days	Education, Survey
World Food Day Comm. & Sub.	7	Dept. Representative

Food Education is a very important aspect of the Home Economics Extension program. Weekly newspapers, radio and cable are the key delivery systems for the sections media work and is carried out on a weekly basis all across the province.

Valorie MacKinnon developed a garnishing workshop to promote Nova Scotia products. The staff were also trained so they in turn could conduct the same workshop in their regions.

The Home Economics staff assisted in the Taste of Nova Scotia program by developing and testing recipes and conducting train the trainer sessions regionally.

Marjorie Knowles assisted the Fruit Growers' in a very successful apple promotion project in Toronto. Her job was to train in store demonstrators about the qualities of the gravensteins.

This year was the twelfth year of production of the Garden Guide radio tape series. Home Ec does 15-17 tapes as part of the total series. It runs daily during the gardening season on approximately 10 radio stations.

Agricultural Awareness programs are a priority of the Home Ec Section. The Home Ec Section developed a five-year plan on agricultural awareness and currently aspects of the plan are being implemented.

Cheryl Butts-MacMillan and the Inverness W.I. have developed a Grade 6 kit for teachers. The package is undergoing a second pilot. From all reports it was extremely successful.

The Cape Breton County team with funding from McDonalds allowed the development of the McDonaldland Mini Farm in the agricultural exhibition building during the exhibition. Along with that, Jane Lewis created the Country Farm Jamboree Puppet Show. Currently the puppet show is visiting schools on Cape Breton Island.

The Bridgewater Exhibition has formed an Agricultural Awareness Committee and Valorie MacKinnon is assisting them in planning their activities for the upcoming year.

For the second year in a row, Food Fest was held in Truro. The Extension team, including Gail Keddy, Co-ordinated an Agricultural Awareness Exhibit.

The Food Products and Nutrition Binders in schools continue to be a resource to the Family Studies Teachers. This year two new coupons were added making $95.00 worth of Nova Scotia products available to the Classroom.

The Nova Scotia Agricultural Awareness Committee is chaired by Susan Horne. Over the year, the Committee was able to get a part-time co-ordinator to assist them with their activities. The major event was the Atlantic Winter Fair. Eleven different commodity groups or individuals assisted in an arena program (Dairy Bureau of Canada and Milk Nova Scotia, Pork Nova Scotia, Fruit Growers', Sheep Producers' Association, Turkey Marketing Board, Strawberry Growers' Association of Nova Scotia, Plant Industry Branch, Beekeepers Association, Animal Industry, Nova Scotia Chicken Marketing Board and committee members). The children could visit each of the eleven exhibits during a two-hour period. Along with that the commodity groups featured a Food Pursuit Game in the exhibits building. The Country Farm Jamboree Show Puppet Show was there as well. In the dairy barn a special cow display created a lot of interest. This was made available by Milk Nova Scotia, the Ag Awareness Committee, and the Atlantic Winter Fair. Approximately 6,000 children visited the fair. Special thanks to all the groups and individuals who helped make this fair program possible.

The Farm Tour Guide to help farmers to conduct schools on their farm has been released. The Educational Resource Guide and the Teachers version of the Farm Tour Guide are nearing completion.

SECTION III **WOMEN'S INSTITUTES OF NOVA SCOTIA**

# of Institutes in Province 111 (117)

# of Members in Province 1667 (1700)

I. REGIONAL	# OF	ATTENDANCE	II. PROVINCIAL	# OF	ATTENDANCE
Home Calls	45	–	Prov.of area Conv	1	565
Office Visits	76	–	Board Meetings	3	54
W.I. Branch Meetings & Programs	29	508	Committees	2	15
Workshops	84	309	Farm Women's Comm.	4	20
Program Planning Meetings	26	138	Farm Women's Conf.	1	85
Spring Executive	19	678	Farm Women's Conf. Committee	3	18
Rallies	17	516	Special Events	6	3369

III. SPECIAL PROGRAMS:

Recycling Blitz, Berwick
You Can Make A Difference Convention Programs (2)
Do Something Special Award Display
Craft Workshop (4)
Provincial Leadership Workshop
Hardwoodlands Junetters - Women As Consumers Workshop
W. I. Board of Directors Training Session
W. I. Night, Baddeck.

Women's Institutes have had a particularly challenging year with a change of Executive Directors three times. Sandy Savage is the Executive Director now.

The membership numbers continue to decline in W.I. This year showed a loss of six branches and 33 members.

A special Leadership Workshop was conducted in April.

The Infant Restraint Program still continues to be a popular W.I. Project. W.I. volunteers rent infant seats for a nominal cost. These volunteers are located all across the province.

The Farm Women's Committee is a Committee of W.I. Nova Scotia decided not to be part of the National Network but would concentrate on activities in Nova Scotia. The Farm Women's Committee produce a quarterly newsletter.

Farm Women's Conference

The eleventh conference was held in November. This committee planned this conference to be specifically targeted to farm women who wanted to be more active in their organizations. Rosalie Wysocki was the keynote speaker for the two days and she spoke on personal motivation, goal setting, and positive mental attitudes. In a short period of time, Rosalie had the conference participants sharing success stories, feeling good about their accomplishments, etc.

Also other speakers included Susan Sutherland, Fresh For Flavor, speaking on answering consumers questions on food safety, Peggy Godfrey on labour relations, along with that the evening program included a series of 'How To' workshops. Local lawyers Marie Dechman from the Women's Directorate and Extension Home Economists conducted these.

This conference was made available through the AFDA funding agreement, the Home Ec Section, W.I. as well as other agricultural related groups.

The attendance was disappointing and there were a number of factors for that, the restriction - only bonafide farm women eligible to attend and the change in executive directors which affected publicity. Anyway, the evaluations indicate an extremely successful conference, and those who did not attend missed an opportunity.

SECTION IV — 4-H YOUTH PROGRAM

of Clubs in Province 126 (125)
# of Members in Province 2805 (2696)
# of Homemaking Leaders 394 (N/A)
Homemaking Members 1684 (1584)
% Project Completion 86.5 (88.4)
# Leaders 985 (962)

LOCAL	# OF	ATTENDANCE	INVOLVEMENT
Client Calls	190	-	Counselling, advisor, club organization, leader development
Office Calls	303	-	Answering requests, counselling
Judging practice, club meetings, sub-committee meetings	146	2096	Advisor, resource person, instructor, facilitator
Achievement Days	102	5655	Judge, resource person, staff
Judging Sessions Marking Days	20	1844	Judge, staff
Workshops	13	551	Resource person, co-ordinator, instructor
Exhibitions	16	18,000	Coordinator, supervising
Regional & County Rallies	11	1,230	Organizer, judge, resource person, P.R.
Special Events	22	1,965	Staff Advisor
Other-Award interviews, staff meetings, exhibition meetings	58	328	Advisor, coordinator, interviewer, resource person, P.R.

PROVINCIAL	# OF	ATTENDANCE	INVOLVEMENT
4-H Weekend	1	1,250	Judge, coordinating competition, advisor
Leaders Development	1	95	Chair and staff
4-H Show Comm. & Sub.	14	85	Hosting, resource, advisor, coordinating competitions, etc.
Provincial Council & Sub	6	75	Advisor, Staff
4-H Show	1	10,000	Staff, coordinator, advisor

PROGRAM DEVELOPMENT

Crafts n' Creations Workshop
Canadian 4-H Council Hosting
Manual Revisions & New Releases
-Breads & Cereals
-Heritage Levels 1 - 3
-Cake Decorating Level 3
Computer Input of Manuals
Safety Inserts for Manuals
Camp Rankin Menu & Food Purchasing
4-H Scholarship Judging
Regional Workshop
Marilyn Naugler Crafts Workshop

OTHER

4-H Citizenship Seminar
Key Leaders Workshop - P.E.I.

The Crafts n' Creations Workshop was very successful with 85 leaders and senior members in attendance. Technical craft skills and 4-H project skills were featured in the agenda. The main part of the funding came from the Canadian 4-H Council Technical Knowledge Opportunities program. Assistance was also provided by the Nova Scotia 4-H Council, 4-H, Town of Truro, Kings County Council, Mayflower Quilters and the Municipality of Colchester. Special thanks to Gail Keddy, who chaired the workshop and the planning committee and to the other Home Economists who carried out many other details to make the workshop a success.

Hosting the Canadian 4-H Council Annual Meeting in Nova Scotia was a success in making the visitors truly welcome to the province. Colleen MacNeil worked on hospitality and Cheryl Butts-MacMillan on the spouses program.

1990 was particularly challenging with regard to the homemaking manuals. Many were put on computer and had to be edited and there were a number of rule changes to incorporate.

Along with that the foods and heritage manuals were revised and two new level threes were developed in Heritage and Cake Decorating. Also, safety information was developed and incorporated in the Foods, Sewing and Crafts projects.

It is always a challenge to keep these manuals as up-to-date as possible and 1990 was particularly time consuming to accomplish that goal.

Several successful regional workshops were held and reported on in the 4-H annual report. These workshops have been coordinated by the regional team.

Nova Scotia has been successful in receiving TKO monies to develop a modelling video for sewing members. Jane Lewis has initiated that project.

Looking at the 4-H statistics, it is interesting to note that homemaking members reflect 60% of the total members in the province. The project completion rate in homemaking is down 1.9%, however, all areas dropped in 1990 ranging from "other" 4.6 to the 1.9 drop in homemaking. With a slight increase in the number of homemaking members registered, and even with the decrease in completion rates, there were 56 more completions in '90 than in the previous year.

SECTION V FARM & AGRICULTURE RELATED ACTIVITIES

	# OF	INVOLVEMENT & PURPOSE
Community Fairs, Festivals	11	Organizer, judge, advisor
Exhibitions, Evaluation Committee	14	Hired judges, advisor, evaluator
Safety Workshop	1	Coordinator, education
County Farm Women's Day	6	Coordinator, advisor
Young Farmers' Conf. & Committee	4	Chair, committee
Goal Setting Workshop	1	Team coordinator
Judges Clinic	1	Staff, instructor
Judging Standards		Editor of Manual
Judges List & References		Coordinator
Exhibition Display	6 days	Promote services of Dept.
AFDA Meetings	7	Dept. Rep.
Federation/Commodity Meetings	5	Observer, presented report
Farm Health & Safety Planning Meetings & Competition	7	Committee member
Farm Health & Safety - Sub & Projects	10	Coordinator, staff
Extension Newsletter & Committee	4	Staff
Kiwanis Farm Family Award Committee	1	Advisor, committee

ANALYSIS

Since 1983 judging clinics have been held to improve the quality of judging in the foods, crafts, and sewing area, establish a list of qualified judges and to develop a set of judging standards. At this point in time those objectives have been fulfilled. There are approximately 70 judges able to judge exhibitions, community fairs & 4-H. This has enabled Home Ec staff time to be freed up to complete other activities.

The Farm Health & Safety Committee developed a Chemical Safety Booth. Home Ec revised the Pesticide Clothing publication to go with the booth. As well Sun Safety was an activity Home Ec supported the Committee in promoting. The incidence of skin cancer in farmers and gardeners is significant and warranted this program.

The Extension newsletter is our communication vehicle to 5,000 farm and 4-H families. In each issue Home Ec contributed to the editorial committee and a one page article.

SECTION VI OTHER ACTIVITIES

PROFESSIONAL DEVELOPMENT

	# OF	INVOLVEMENT & PURPOSE
Effective Presentations Workshop	2 days	Participants (4)
ACEEE	½ day	Presenter
Home Ec Staff Meetings	6 days	Staff
NSIA Meetings	3 days	Participant
Impromptu Presentations	2 days	Participant
Regional County Office Staff Meetings	8 days	Staff, participant
Agriculture in the Classroom Conf.	3 days	Participant
Situational Leadership Seminar	2 days	Participant
Time Management Workshop	2 days	Participant (3)
Department Staff Conference	2 days	Participant
CSE Meetings	2 days	Director
N.S. Home Ec Assoc.Comm.	3 days	Participant
N.S. Home Ec Assoc. Media Workshop	1 day	Participant, host
Supervisors Meetings	3	Supervisor
Staff Evaluations, Visits	10	Staff
Pay Equity Questionnaire	1	Home Ec Rep.
Extension Staff Meeting	1	Staff
Child Abuse Workshop	½ day	Staff
Media Workshop	1 day	Participant
First Aid Course	1 day	Participant
Key Leaders Workshop	2 days	Participant
Direct Marketing Challenges Conf.	3 days	Participant
Mission Statement Project	6 days	Committee
Human Resources Library Project	-	Project Leader

OTHER

	# OF	INVOLVEMENT
Status of Women - Sub-Committee	11	Dept. Rep.
Natural Resources Co-ordinating Comm(LLRC)	3	Dept. Rep.
N.S.A.C. Day Care Board of Advisors	3	Staff Rep
CAEC Hosting	4 days	Director
Women In The Workplace Session	1 day	Presenter
Jean Munro Library Project	1½ day	Coordinator
Home Study Course	6 weeks	Coordinator
Home Study TV Show	8 segments	Researcher, Presenter
Career Day	1	Presenter
Rug Hooker Guild	1	Presenter
Quilts of the Island	1	Advisor

CATALOGUED PROGRAMS REQUESTED:

Regional Offices	6
Transparencies	12
Slides	56
Package Programs	59
Videos	73
TOTAL	206

In 1991 there were a number of opportunities for staff training and development as indicated in Section VI.

Along with that, and through federal provincial funding, a new library of resources has been acquired. Video and audio tapes, books, binders and workbooks have been purchased and catalogued for the staff to borrow.

The Mission Statement Project combined with Key Result Area Development, coupled with an internal look at the Home Ec program and direction; required the staff to meet a number of times. This was followed by a joint 4-H/Home Ec meeting to establish priorities.

The Jean Munro library project is complete with a variety of Extension books available for the staff.

The Canadian Agricultural Extension Council was hosted by Nova Scotia this year. The home study course on family financial management was offered with approximately 250 registrants. A cable show to go through the Home Study was launched by Valorie Mackinnon.

CLOSING

This year has been a particularly challenging one for the section. In the Department reorganization, the five-year plan they worked so hard on got caught in the shuffle.

Along with this the section had to seriously ask itself if it was in the business of developing people and programs or just programs. If only in the program development area, it allowed for the rearrangement of work and a different approach to projects.

During the summer we completed a client survey. It was very rewarding to hear the clients tell how helpful, available and knowledgeable the Home Ec staff were. The clients also recognized the large geographic areas they have to work in and the challenge that creates. Client survey also reinforced the agricultural awareness direction and the people development work the Section does.

After a lot of discussion and thinking, we did confirm that we are in the people development business. That is the fundamental basics of Extension Work. The current structure with program priorities we concluded was the best approach right now.

A special thanks to the Home Economics staff for their patience in going through this visionary process, the mission statement development and key result areas. It's never an easy thing to do.

At the time of writing this report, a survey of Grade 2 and 3 teachers is being done to see what their needs are to do agricultural awareness projects in the classroom.

I want to say a special thank you to each of the Home Ec staff. Each brings individual ideas, as is evidenced throughout this report as you read their name and the project they are involved with. At the same time, their commitment to the job and to extension, make them a team to be proud of because of what has been accomplished.

In conclusion, a thanks to many others in the Department who have helped out too. Also, special thanks to Dave Sangster with his understanding, Margie Johnson and her patience as the work I gave her never seemed to end and to Liz Crouse for her ideas and enthusiasm.

Respectfully submitted,

Susan Horne

Susan Horne, Supervisor
Home Economics Section

EXTENSION AGRICULTURAL ENGINEERING SECTION

ANNUAL REPORTS 1990

ANNUAL REPORT

EXTENSION AGRICULTURAL ENGINEERING SECTION

January 1, 1990 to December 31, 1990

Prepared by

John K. Higgins, P.Eng.
Chief Engineer

INTRODUCTION

The work of the Extension Agricultural Engineering Section involves the provision of technical support services for Government programs to assist farmers and the agricultural industry in the construction of capital works. These works include all types of farm structures for livestock housing, crop storage and handling, land development works and land protection works. The Section is also involved with providing construction and technical services related to farm mechanization, crop processing and storage, as well as energy conservation and utilization.

The staff complement of the Division is made up of the following people.

Agricultural Engineers	9
Agricultural Technicians	8
Aboiteau Superintendents	5
Casual Technicians	4
Clerical	3
Total	29

There were also 20 seasonal labourers with the Section for varying periods of time to carry out the Land Protection work.

A listing of staff members is included as Appendix III.

For the purposes of this report the work of the Section is reported under two major program areas consisting of Soil & Water and Technical Services to reflect the program areas under the two Engineering Supervisors. Miscellaneous and general matters are included at the end of the report.

SOIL & WATER

1. Land Improvement

This aspect of the work deals with providing technical and administrative support to the Land Improvement Program and is carried out by two staff engineers, one engineering technician, two survey assistants, two full-time inspectors, two casual inspectors, one casual chief inspector, with assistance from two aboiteau superintendents. The clerk of grants provides the clerical and accounting work. Overall administration is provided by the Chief Engineer.

A summary of Land Improvement Program statistics is as follows:

No. of applications received	1034
No. of Applications approved	994
No. of applications rejected	33
No. of applications pending	7
Total value of applications approved	$8,439,225
Grant value of applications approved	$6,329,419
Total value of dollars approved for 91/92	684,613

A summary of work done to December 31, 1990 is included as Appendix I of this report. Work done is on the basis of claims paid to the above noted date. The Policy runs on a fiscal year April 1, to March 31.

This past year was the third year of the Land Improvement Program under a five-year AFDA II agreement. There were no significant changes to the Land Improvement Program which forms Part A of the Soil & Water Management Program, and administratively things went very smoothly.

Part B of the Soil & Water Management Program is made up of three programs; the Main Outlet Drainage Program, and the Cooperative Land Assembly and Development Program. This part of the program is jointly funded by the Province and the Federal Government and is administered by the Soil and Water Implementation Committee. Two members of the Engineering Section are on the Implementation Committee. Staff of the section, provide the engineering for these programs. Statistics for these programs are provided in other sections of the report.

The Section is also responsible for the engineering for the Farm Pond Program and for technical consultation and design for irrigation work.

Staff who are responsible for land improvement work made the following calls.

Professional Staff:	
Drainage Calls	176
Pond Calls	120
Irrigation Calls	24
Misc. calls	72
Technical Staff:	
Miscellaneous calls	360
Inspection Staff	
Field Inspections	1643+

The following service was provided:

Subsurface drainage surveys	270 acres
Irrigation system plans	5
Grassed waterway layouts	1800 ft
Surface ditching profiles	175,850 ft
Surface ditching layouts	160,395 ft
Misc. surveys for topos, irrigation, etc.	955 acres

Staff were involved with a major drainage research plot in Cumberland County. Monitoring equipment was installed on the site and data collected from spring through fall. Some analysis has been carried out.

Staff were also involved in a project to evaluate subsoiling both before and after subsurface drainage installation at two sites in the province.

The drainage engineer made an investigative trip to Europe to look at gravel backfill over subsurface drainage systems. He suggests that it would be of questionable benefit under local conditions.

Staff cooperated with ALICA in putting on a major land clearing demonstration in the province in August. As a result, a technical report has been produced and a 10-minute video on land clearing techniques has also been produced and distributed.

2. Land Protection

This area of work includes programs related to the operation and maintenance of tidal dyke systems, the operation and maintenance of flood control structures on the Musquodoboit River and Brierly Brook and the construction of Main Outlet Drainage channels.

The land protection work is divided into five geographic regions each with an Aboiteau Superintendent to oversee and coordinate the work.

The land protection staff complement consists of a supervising engineer, 5 aboiteau superintendents, 1 surveyor, 1 survey assistant, 2 casual survey assistants and up to 24 casual foremen, mechanics, and labourers.

Two of the aboiteau superintendents also have direct responsibilities for inspection services associated with the Land Improvement Program.

Work on St. Mary's Bay Dyke was completed. This brings to an end a three-year project to completely rebuild aboiteaux and dykes on this marsh. This dyke is now in better shape than it has ever been since it was rebuilt by the Federal Government in the early 60's.

A total of seven aboiteaux were repaired/replaced with polyethylene pipe. The maximum benefit of this pipe was observed this year when a 2 1/2 ft by 3 1/2 ft wooden sluice was lined with 36" diameter pipe. Similar efforts are planned for 1991 as there are a number of structures of similar size that are in poor condition.

Generally, the dykes themselves are in good shape and unless we get some exceptionally high tides, emphasis will be put on aboiteaux repair rather than on dykes. Rock work will continue to be an ongoing concern as erosion rates can vary greatly from year to year, and in other areas foreshore is gradually getting closer to dyke.

Various types of surveys also occupied a large portion of staff time.

A total of one month of field time was spent on detailed elevation surveys for a blueberry levelling project.

Every year more requests come in from structure engineers to give assistance with farmyard layouts especially as it relates to location of new barns. The total station is the ideal instrument for this because once a plot has been made it is very easy to come back and locate new buildings at exact locations where shown on plans.

Surveys were also undertaken to measure tobacco acreage for the Tobacco Growers Association.

Some work is still being carried out on dyke right-of-ways being officially turned over to the province. Now that legal surveys have to be carried out for each individual lot, a considerable amount of time is spent trying to locate property boundaries.

Staff were also involved in the production of a video on the Development of the Dykelands in Nova Scotia. The video is seven minutes in length and will be distributed to all agricultural offices.

A summary of work undertaken by the land protection staff is as follows.

Aboiteaux constructed/repaired	7
Main Outlet Drainage surveyed	188,629 ft
Dyke profile surveys	257,987 ft
Land forming surveyed	616 acres

A summary of work completed by geographic regions for land protection is included in Appendix II at the end of this report.

TECHNICAL SERVICES

1. Farm Structures

A significant segment of the Extension Engineering work is provision of engineering counsel and technical planning and assistance for farm structures. Farm structures include livestock buildings, crop storages, manure storages, material handling facilities, and other miscellaneous structures.

The farm structures work involves more of a team work approach than does some of the other types of engineering work. Engineers must work closely with other specialists in providing plans and counsel to clients.

Work in the farm structures field is carried out by four agricultural engineers and two draftsmen.

The Canada Plan Service is still a very valuable tool in the structures work. Many of the plan sets sent out use CPS details and components. Nova Scotia is represented on the management committee of CPS and on four of the nine series committees.

Although there was considerable demand for engineering design to update and improve present facilities, the development of new technology also increased. Many of these new projects were developed in cooperation with various agricultural support programs such as Capital Grants, AFDA, ALFI, Comprehensive Farm Development and the Beef Development Program.

While not all of the plans prepared are used in construction, the integrity of the plans must still be maintained. The quality and technical details of plans produced by the Section must continue to match the expectations of our clients and the professional standards of the engineering community.

A new Pesticide Storage Program was introduced this year by NSDAM. The structures engineers assisted in the developing of this program and have continued to work closely with the Department of Environment to promote the development of the ideal on-farm pesticide storage facility.

The improper maintenance of concrete tower silo is still a concern. Two Fact Sheets, one on silo maintenance and one on silo repairs, were released this year to help inform the farmer of these concerns. A technology program is being developed to evaluate and promote proper silo repairs.

In September, the duties of several of the structures engineers were rearranged. Gary Bishop was transferred from Kentville to Truro. Structures engineers now each have a geographic territory along with an area of specialty. This should equalize workloads and help to streamline service.

Extensive planning has been done on five large dairy facilities within the Province, four of which were constructed. Two of these facilities were the result of planned expansion and two were due to the loss of existing facilities to fire. In cooperation with the NSDAM, these farmers were able to build four of the most modern dairy facilities in Eastern Canada.

The Technical Services Group met on four separate occasions to communicate and update each other on policies and technology. Also, a general tour of projects, in the western part of the Province, was conducted. As well the Group attended the ACAE workshop in Fredericton and one of the topics discussed was natural ventilation which was studied in some detail.

In keeping up with technology on an international level, technical research trips were taken by various staff members to Holland, Sweden, Germany, Ontario, British Columbia and Washington state.

The following is a summary of Custom Plan Sets developed over the past year:

COMMODITY	NUMBER
Beef	49
Dairy	24
Swine	23
Sheep	1
Poultry	3
Horticultural	15
Grain Forage & Feed	17
Special Structures	45
Building Component	15
TOTAL	192

Number of new Custom Plan Sets prepared	192
Number of Plan Sets Distributed	2600
Number of Farm Calls	831
Number of Projects where engineering services were supplied	715

2. Farm Power & Machinery

This aspect of the work is handled by one staff engineer and one engineering technician with occasional support from other staff as required.

The sale of farm equipment has slowed over the past year. Many farmers are minimizing their debt load by reducing the purchase of farm equipment. The farmers that are presently buying equipment are carefully evaluating the specifications and questioning the capability before purchasing. This has led to a continuous increase in demand for updated information on equipment specifications and new technology.

The mechanization group has worked very closely with the AFDA and ALFI programs. These programs continue to promote, introduce, evaluate and support proper management of new technology. In cooperation with these programs, farmers, Ag. Reps., and the Crop Specialist; the following new technology projects were supported:

Tubline Wrapper
ASA Carrot Harvester
Pesticide Safety Cab
Traileyre Big Bale Handling
Onion Topper
Celery Harvester
Electronic Color Sorter of Strawberries
Fixed Bale "Round Bale Handler"
Orchard Sprayer
Disc Plow
Evaluation of Grain Stripper Header
Windrow Hay Fluffer
Strawberry Harvester
Blueberry Land Levelling
Computerized Machine Management
Scotia Hay Co-op Hay Compaction & Handling
Spray Check Program
Round Bale Feeder
Radium Heat Pruner (Blueberry)
Fertilizer Incorporating Herbicide
Mulching Garlic

Field days such as EXPO 90, Plowing Demonstrations and Sprayer Clinics were used to educate the clients on new technology and the proper use of existing technology in the area of mechanization.

There is a continuing interest in the proper use of primary tillage equipment in the industry. This is evident from the growing interest in Plowing Demonstrations and Competitions. There were a total of five county plowing matches and demonstrations held in Musquodoboit, Pictou, Sydney, Truro and Mabou. Also a provincial plowing match was held at EXPO 90 in Sheffield Mills.

There were several Field Days put together by the industry. These included:

Forage Equipment Demonstration by Ghel
Plowing Demonstration by Kvenerland
Industrial Forest Show (Silvalog '90)
ALICA Land Clearing Demonstration

The mechanization engineer had the opportunity to tour through the Netherlands and Germany to evaluate the latest in technology in mechanization. This included several days at the Rie Machinery Show in Amsterdam, tours of several farm equipment manufacturers in Germany and an evaluation of a number of dairy facilities throughout the Netherlands.

Over forty farm calls were made to various clients apart from project related calls. Calls involved machinery management, tillage, materials handling, seeding, mulching, pruning, harvesting and energy conservation.

OTHER ACTIVITIES

Staff of the Engineering Section are also involved in many other areas of work through various professional and departmental committees and boards.

Some of the committees on which staff members serve include:

1. Atlantic Committee on Agricultural Engineering.
2. All ACAE Advisory Committees.
3. Canada Expert Committee on Agricultural Structures.
4. Canada Plan Service Management Committee.
5. Canada Plan Service Series Subcommittees (5).
6. Canada/Nova Scotia Stream Alterations Committee.
7. Environmental Wildlife Committee.
8. NSDAM Research Committee & NSDAM Eng. Research Review Committee.
9. Agricultural Research Institute.
10. NSDAM Committees such as Community Pastures, Limestone, etc.
11. AFDA II Soil & Water Implementation Committee.
12. Professional Organizations, Councils & Committees such as APENS, CSAE, ASAE, NSIA.
13. Atlantic Land Improvement Contractors Association.
14. Environmental Task Force on Farm Waste Management.
15. Nova Scotia Soils Institute.
16. Atlantic Farm Machinery Institute.
17. Interdepartmental Technical Flood Committee.
18. Atlantic Farm Mechanization Show Inc. Committee.
19. Beef Development Program Committee.
20. NSDAM Capital Grants Committee.
21. Canadian Farm Builders Association.

Various Fact Sheets were produced to promote and inform the Industry of timely concerns. This included cooperating with ACAE to produce two Fact Sheets as follows:

- Precautions For Use of Front-End Loader
- Maintenance of Concrete Tower Silos.

As well, two Provincial Fact Sheets were produced:

- Repair and Restoration of Upright, Cast-In-Place Concrete Silos.
- Cattle Weigh Scales (presently being modified).

The Eleventh Annual Atlantic Committee on Agricultural Engineering (ACAE) Workshop was held in Fredericton on February 19-21, 1990. All of the staff engineers from the Atlantic region attended the three-day technical seminars and workshops.

Staff members also attended a variety of conferences, both professional and general, as well as technical seminars, general seminars and short courses, and professional and personnel development courses. These are all very important aspects in keeping up to date and abreast of new technologies and being able to convey that knowledge and technology to the client.

SUMMARY

The Engineering Section continues to experience strong demands for its services from the Agricultural community. Striving to keep abreast of new technology and to supply a high quality engineering service to our clientele continues to be the aim and objective of the Engineering Section.

This report has attempted to summarize the Section activities and to highlight milestones and accomplishments.

We would like to extend our appreciation and thanks to other members of the Department for their cooperation and guidance over the past year. A special thank you to our Director and Assistant Director for their guidance and support.

I personally want to extend my thanks to each and every member of the Section for their efforts, cooperation and support during the past year.

A special thanks to the clerical staff for their support and very valuable contributions to the operation of our Section.

APPENDIX I

LAND IMPROVEMENT STATISTICS 1990-91

(March 31, 1991)

CATEGORY	UNITS OF WORK COMPLETED	TOTAL GRANT VALUE	# OF JOBS	AVERAGE COST
Land Clearing	2069 acres	1,431,341	376	910.56/A
Windrow Removal	46,857 ft	78,164	59	2.22/ft
Apple Tree Removal	14,254	37,115	41	3.47/tree
Debris Removal*	N/A	144,498	28	N/A
Underdrainage	3,895,068 ft	2,065,806	437	0.71/ft
Surface Ditching	581,921 ft	278,890	278	0.64/ft
Ditch Spoil	249,996 ft	62,902	115	0.33/ft
Land Forming	600 acres	161,611	68	359.15/A
Roads on Dykelands	15,550 ft	20,339	9	1.74/ft
Land Levelling	630 acres	162,831	166	344.63/A
Ripping	45 acres	5,100	4	151.11/A
Blueberry Land Clearing	347 acres	69,111	47	199.16/A
Firebreak Construction	45,037 ft	5545	15	0.16/ft
Blueberry Heavy Equip.	936 acres	160,676	78	228.89/A

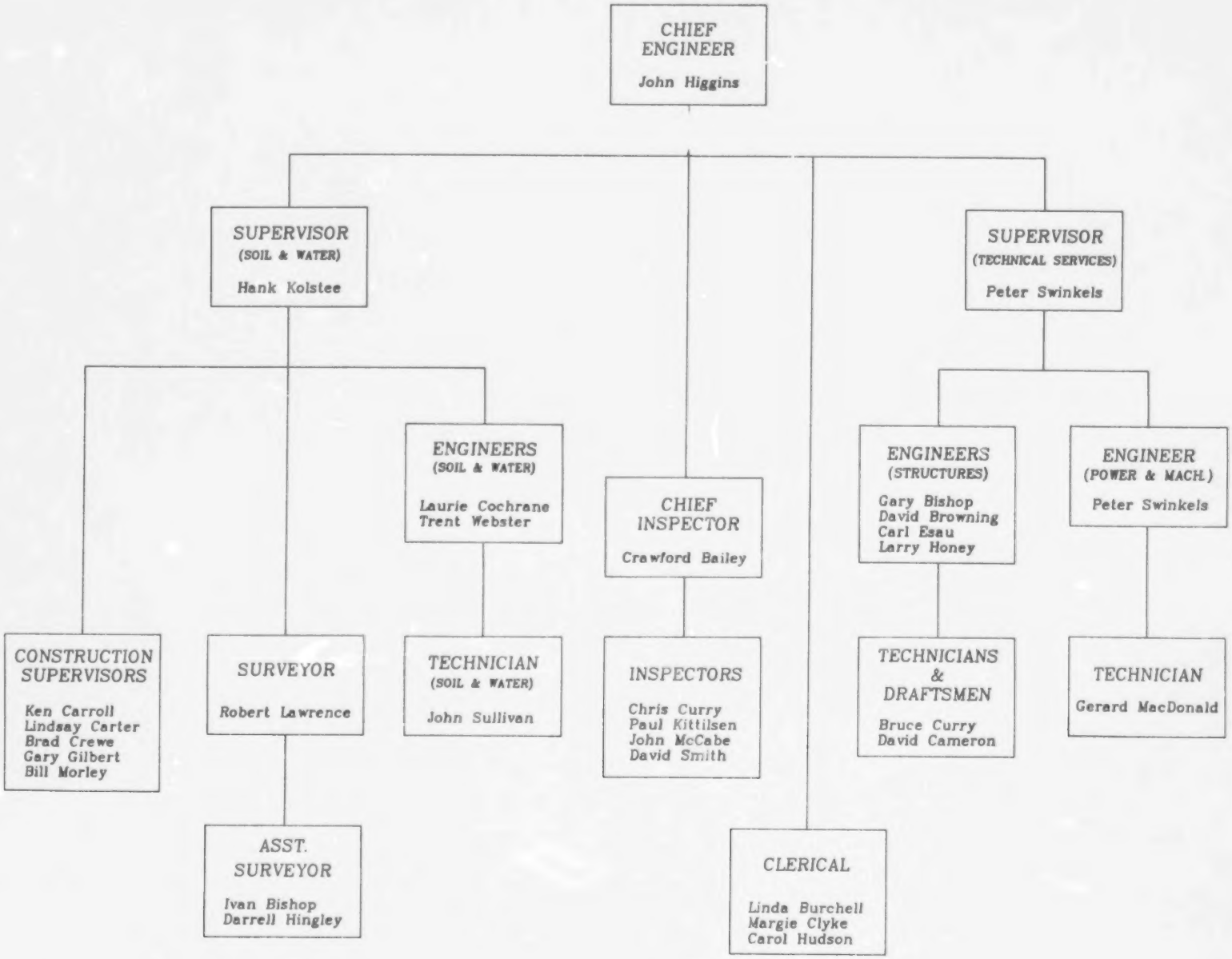
* includes burying rock, burning old piles, rotoveyor work, etc.

APPENDIX II

LAND PROTECTION

SUMMARY OF WORK CARRIED OUT IN EACH AREA - 1990

	AMHERST	ANNAPOLIS	KENTVILLE	WINDSOR	TRURO	TOTAL
New or completely rebuilt abt.	2		2	1	2	7
Major repairs # abt.			1		1	2
Ditch excav. (ft)	66,300		24,000	4,485		134,785
Ditch spoil levelling(ft)	66,300		66,300	29,400	3,900	165,900
Dyke topped (ft)	8.100	10,500				18,600
Rock tonnage	16,135	26,600			16,030	58,760
Total aboiteaux in area	73	21	41	54	89	278
Total miles of dyke	48.7	9.2	25.9	21.4	44.8	150


CHIEF ENGINEER
John Higgins
SUPERVISOR (SOIL & WATER)
Hank Kolstee
SUPERVISOR (TECHNICAL SERVICES)
Peter Swinkels
ENGINEERS (SOIL & WATER)
Laurie Cochrane
Trent Webster
CHIEF INSPECTOR
Crawford Bailey
ENGINEERS (STRUCTURES)
Gary Bishop
David Browning
Carl Esau
Larry Honey
ENGINEER (POWER & MACH.)
Peter Swinkels
CONSTRUCTION SUPERVISORS
Ken Carroll
Lindsay Carter
Brad Crewe
Gary Gilbert
Bill Morley
SURVEYOR
Robert Lawrence
TECHNICIAN (SOIL & WATER)
John Sullivan
INSPECTORS
Chris Curry
Paul Kittilsen
John McCabe
David Smith
TECHNICIANS & DRAFTSMEN
Bruce Curry
David Cameron
TECHNICIAN
Gerard MacDonald
ASST. SURVEYOR
Ivan Bishop
Darrell Hingley
CLERICAL
Linda Burchell
Margie Clyke
Carol Hudson

FINAL REPORT

ON

MISSION STATEMENT/RESULTS PROJECT

EXTENSION SERVICES BRANCH

JULY, 1990

INTRODUCTION

The following is a brief summary of the final report, which was published in July of 1990.

PURPOSE

The purpose of this project was to strengthen the Extension Services Branch operations by providing:

(a) overall direction through a Branch mission statement and statement of Branch values;

(b) better individual staff direction through position main expectations or key result areas and the essential skills needed for each position;

(c) ways to measure staff accomplishments through selected measurement indicators and a performance review and skills assessment system.

NEED

Government organizations and their employees are accountable to the public they serve. It is necessary to demonstrate Branch accomplishments and client acceptance to support budget dollars received. Adopting the recommendations in this report will ensure documented Branch accomplishments. Further, to enhance staff motivation and improve performance, clear goals and regular feedback are necessary. Establishing goals and providing feedback through a mission statement, position key result areas and performance review and skills assessment are recommended in this report.

MISSION STATEMENT

The following mission statement for the Branch was developed by the Committee in December, 1989, circulated to Branch staff in January 1990 and reviewed again on April 24, 1990.

> **Staff in the Extension Services Branch are primarily educators who offer high quality advice, information, service and educational programs to farmers/farm families, farm and rural organizations, agri-business and the public at large for the purpose of developing people, to promote and enhance a viable agricultural industry and to improve the quality of life for their clients.**

Although there were some suggestions to shorten and revise the statement most people accepted the statement as an accurate and complete Branch Mission. It is recommended the Branch adopt the mission statement as written.

It was also recognized that any Branch mission statement, to be useful, must be reviewed regularly and revised, if necessary. It is recommended the Branch mission statement be reviewed annually, but accepted in its present form for at least two years.

STATEMENT OF BRANCH VALUES

The purpose of a Branch statement of values is to provide a focus point for staff work. The statement shares with staff the values their Branch considers to be important. It is particularly useful for new staff members. The following statement of Branch values was reviewed at the April 24 meeting.

> **Extension staff workers are involved daily with people who feel the effects of current society issues like environmental protection, conservation, national and international trade and economic security. Because of this we understand the need to be close to our clients. We are committed to quality client service. We value flexibility. We recognize the need for good communications with clients, our colleagues and Branch and Department Managers. Above all else, we know our work is important. Commitment to these values makes our Branch a good place to work.**

It was supported by staff as a good statement of important values, particularly the emphasis on good communications. It is recommended the statement of Branch values be adopted by the Branch.

PERFORMANCE REVIEW AND SKILLS ASSESSMENT

The performance review and skills assessment process is a positive developmental one. The role of the manager is to support and encourage like a trainer or a coach and to help and assist like a teacher or consultant.

The role of the staff member is to share accomplishments, look for ways to build on them and search out ways with the manager to improve their work and performance. Approached positively, it is an enjoyable experience that is looked forward to by both manager and staff.

Performance review and skills assessment done regularly (at least annually) is important to:

(a) review job skills and identify training needs,

(b) review job accomplishments as an input to performance measurement,

(c) develop future goals and objectives to build on past accomplishments and

(d) encourage positive communication between staff and manager.

SKILLS

Branch staff were asked to rank order a series of skills to be incorporated into the performance review and skills assessment form. The following list of skills, arranged by descending priority, was developed.

EXTENSION STAFF SKILLS

1. Interpersonal skills
2. Technical knowledge
3. Judgement and analytical ability
4. Cooperation and adaptability
5. Quality and timeliness
6. Leadership
7. Creativity and innovativeness
8. Program planning and organization
9. Initiative
10. Needs identification
11. Attendance and punctuality
12. Public speaking and presentations
13. Resource utilization
14. Execution of work
15. Personal appearance and conduct
16. Written communications
17. Stress management
18. Evaluation

It is recommended the skills identified and described in the revised performance review and skills assessment form be used as the basis for determining staff training needs.

FIELD SERVICES SECTION

The Agricultural Representatives Section continues to serve a range of rural clients. This section is the front line delivery system of an informal network of applied research and government programs and policies.

- FRONT LINE DELIVERY SYSTEM
- PROMOTE VIABLE AGRICULTURAL INDUSTRY
- MANAGE COUNTY OFFICES
- ADMINISTER ASSISTANCE PROGRAMS
- PROVIDE EDUCATIONAL UPGRADING
- COMMUNICATE TECHNICAL INFORMATION
- LEADERSHIP IN PLANNING AND DEVELOPMENT
- PROMOTE AGRICULTURAL AWARENESS
- MONITOR AGRICULTURAL INDUSTRY

4-H & RURAL YOUTH SECTION

The 4-H & Rural Youth Section provides a development program to rural youth aged 9 to 21 and their adult volunteer leaders.

- *ENHANCE LEADERSHIP SKILLS*
- *DEVELOP INTEREST IN AGRICULTURE*
- *PROVIDE AN AGRICULTURAL AWARENESS FUNCTION*
- *PROVIDE LIASON WITH PROVINCIAL & NATIONAL 4-H COUNCILS*

COMMITTEE:

Don Cameron	Bob Bennett
Liz Crouse	Alan Grant
John Higgins	Susan Horne
George MacKenzie	Ralph Murray

HOME ECONOMICS SECTION

The Home Economics Section staff provides agricultural awareness and food education programs and services aimed at consumers and leadership development for rural organizations.

- *CO-ORDIANTE & CONDUCT FOOD EDUCATIONAL PROGRAMS*
- *CO-ORDINATE & CONDUCT AGRICULTURAL AWARENESS PROGRAMS*
- *PROVIDE TECHNICAL ADVICE*
- *DEVELOP RESOURCE MATERIALS*
- *LEADERSHIP DEVELOPMENT*

EXTENSION ENGINEERING SECTION

The work of the Extension Agricultural Engineering Section involves the provision of technical support services for government programs to assist farmers and the agricultural industry in the construction of capital works.

- *PROVIDE TECHNICAL ENGINEERING SERVICE TO CLIENTS*
- *MAINTAIN & OPERATE DYKES AND ABOITEAUX*
- *CONDUCT APPLIED RESEARCH & TECHNICAL TRANSFER*
- *PROVIDE ADMINISTRATIVE SERVICES*
- *POLICY ADMINISTRATION - PROVIDE FUNCTIONS FOR OPERATION OF ASSIGNED PROGRAMS*
- *PROVIDE INSPECTION SERVICES*

NOVA SCOTIA
FARM HEALTH and SAFETY COMMITTEE

The Committee met four times during the year to discuss issues and concerns as well as initiate farm health and safety projects. Our mandate continues to be "taking leadership in promoting health and safety in the farm community".

ACTIVITIES

SUNSENSE

A joint project of the N.S. Division of the Canadian Cancer Society and the Farm Health and Safety Committee, this campaign was aimed at all farm families and farm workers. The objective was to make people working out of doors aware of the risks of skin cancer (melanoma) and more important - how to minimize these risks. Cancer Society volunteers were on hand at most exhibitions across Nova Scotia with information and promotional material about how to be protected from the harmful rays of the sun.

FARM HEALTH PROJECT

The Committee submitted a proposal for assistance to Health and Welfare Canada in funding a Farm Health survey to determine the current situation re health and farm related accidents as well or suggestions for improvements. Unfortunately we received no further word on this proposal so must assume it was not approved.

SAFETY DISPLAY BOOTH

A new display entitled "Pesticide Safety" was prepared and used 10 times during the year at commodity meetings, exhibitions, mall displays and Field Crops Expo '90.

FARM SAFETY WEEK

National Farm Safety Week takes place each year from July 25-31. The theme for 1990 was "Farm Machinery: Safe Operation, Transport and Maintenance". Press releases and radio broadcasts were prepared and information kits were sent to County Agricultural Offices.

EXTENSION NEWS

Farm safety articles continue to be prepared and included in each issue of Extension News which goes quarterly to over 5000 farmers and 4-H members.

NEW BROCHURE

A revised edition of the brochure on "Protective Clothing for Pesticide Use" was prepared and reprinted during the year in cooperation with the Home Economics Section of the Extension Branch, Nova Scotia Department of Agriculture and Marketing.

SAFETY AWARD

This year six nominations were received all for the individual or farm family award. Mr. Barry Lesser, Weston, Kings County was selected as the 1990 winner and the award was presented in Kentville early in 1991.

NEW SAFETY VIDEO

Dow Elanco Canada Inc. has developed a 16 minute video entitled "Farm Safety for Kids". After viewing the video the Committee agreed that it was very well done and sufficient copies were ordered so that each Agricultural Office now has one available for borrowing.

ACCIDENTS REPORTED

Agricultural Representatives across the province continue to report farm accidents in their county or area to our Committee. To December 31, 1990 a total of 24 were reported with only one fatality.

Tractor related	-	7 (including 1 fatality)
Injuries to eyes, head, hands	-	5
Falls	-	4
Livestock handling	-	3
Cans	-	1
Trapped in feed bin	-	1
Fires	-	3 (no injuries)

Information from the Workers Compensation Board would indicate in excess of 200 accidents reported on farms covered under Workers Compensation.

APPRECIATION

The Committee wishes to express thanks to all those individuals, organizations and businesses who have supported our activities and programs during the year.

Two of the original members of the Committee retired during the year - Al Connor, Bridgewater and Norma Mosher, Truro. They were both presented with a Certificate of Appreciation by the Committee for all their work in the promotion of farm safety over the years.

Two new members have been added to the Committee: Pat Versteeg, Hardwoodlands, representing the N.S. Federation of Agriculture, and Jack Hicks, St. Peter's, N.S. Department of Agriculture and Marketing.

Respectfully submitted on behalf of the Committee:

George MacKenzie, Chairman
Jack Hicks
Pat Versteeg
Eric Fisher
Linda Grant
Susan Horne
Michael Johnson
Donna Langille
Elizabeth Crouse, Secretary
Russ MacIntosh
Robert Murray
Robert Priske
Kevin Sibley
John Thomson
Fred Walsh

YOUNG FARMERS' CONFERENCE

The 1991 Young Farmers' Conference was held at the Old Orchard Inn, King's County, from February 13 through to February 15. A total of fifty-five participants (farmers and farm couples) took part in the two and one-half day conference. These participants came from across the province - from Lunenburg to the Valley Region, Amherst to Cape Breton.

The conference theme 'Farming in a Global Marketplace", was dealt with from a variety of perspectives. Key note speaker, Paul Mann, Agricultural Media Consultant from Alberta, addressed the participants on the topic - "Positive Attitudes Produce Profitable Alternatives". Other speakers included Arnold Rovers, Executive Director, N.S.D.A.M., on the topic of the 'National Agricultural Policy Initiative' and Donald R. Downe, C.F.A., 2nd Vice-President, on "The GATT and Agriculture".

Other conference sessions combined a number of speakers, all dealing with specific aspects of farming in the global marketplace of today. George MacKenzie, Chairperson of the Nova Scotia Farm Safety Committee addressed "Child Care Safety on the Farm". Susan Horne, Chairperson of the Agricultural Awareness Committee, presented an up-date on the Department's programs designed to promote a greater awareness of the importance of agriculture within our province. Conference participants were also presented with entertaining and informative sessions by Gordon Jones of Peninsula Farms and Dr. Phillip La Pierre of the Back School.

A highlight of the conference is the annual tours of various agri-businesses within the hosting region of the province. Seven facilities in total were toured by conference participants.

This annual conference, in addition to presenting the participants with relevant information to their careers as farmers, provided insight into where they should be directing their energies and marketing skills. Speaker, Paul Mann, encouraged participants to "tell their own story" in order that non-farm people be informed and at same time see the importance of farming to all people. The conference also provides an excellent opportunity for young farmers and farm couples to meet with others within the industry. Many also indicate that it's a perfect mid-winter break to revive them for the coming year.

The conference is held annually and is sponsored by the Nova Scotia Department of Agriculture & Marketing. In addition, numerous agriculturally related businesses make significant financial contributions yearly to the conference.

Respectfully submitted,

Valorie MacKinnon
Chairperson
1991 Young Farmers' Conference

NOVA SCOTIA DEPARTMENT OF AGRICULTURE & MARKETING

CAPITAL GRANTS SUMMARY REPORT

1990-91

POLICY	TOTAL ASSISTANCE APPROVED	TOTAL VALUE REQUESTED	UNITS	TOTAL PAID	TOTAL VALUE	UNITS
Dairy	330,545.02	4,043,322.85	85	224,027.73	1,430,935.63	66
Poultry	41,540.00	320,200.00	9	29,045.12	232,347.73	6
Machinery Storage	89,590.00	447,950.00	31	32,422.82	170,632.05	16
Bedding Storage	43,696.00	256,480.00	18	24,257.35	149,526.43	13
Vegetable Storage	2,800.00	14,000.00	1	2,800.00	18,364.17	1
Equipment	23,760.00	118,800.00	14	7,794.96	39,002.40	10
Hogs	148,140.00	842,700.00	30	101,981.18	533,255.50	24
TOTAL A	680,071.02	6,043,452.85	188	422,329.16	2,574,063.91	136
TOTAL B - Farm Safety	78,387.00	183,807.98	50	43,120.98	87,989.54	26
TOTAL C - Pesticide Storages	16,200.00	44,300.00	5	8,115.67	16,231.33	4
GRAND TOTALS	774,658.02	6,271,560.83	243	473,565.81	2,678,284.78	166

MANURE PROGRAM SUMMARY REPORT

Section A	428,060.73	1,597,003.86	47	286,290.73	735,746.10	32
Section B	132,267.14	291,140.00	25	73,141.56	158,790.72	14
Section C	56,500.00	284,916.00	35	27,797.16	139,368.18	22
TOTAL	616,827.87	3,311,059.86	107	387,229.45	1,033,905.00	68

LIMESTONE:

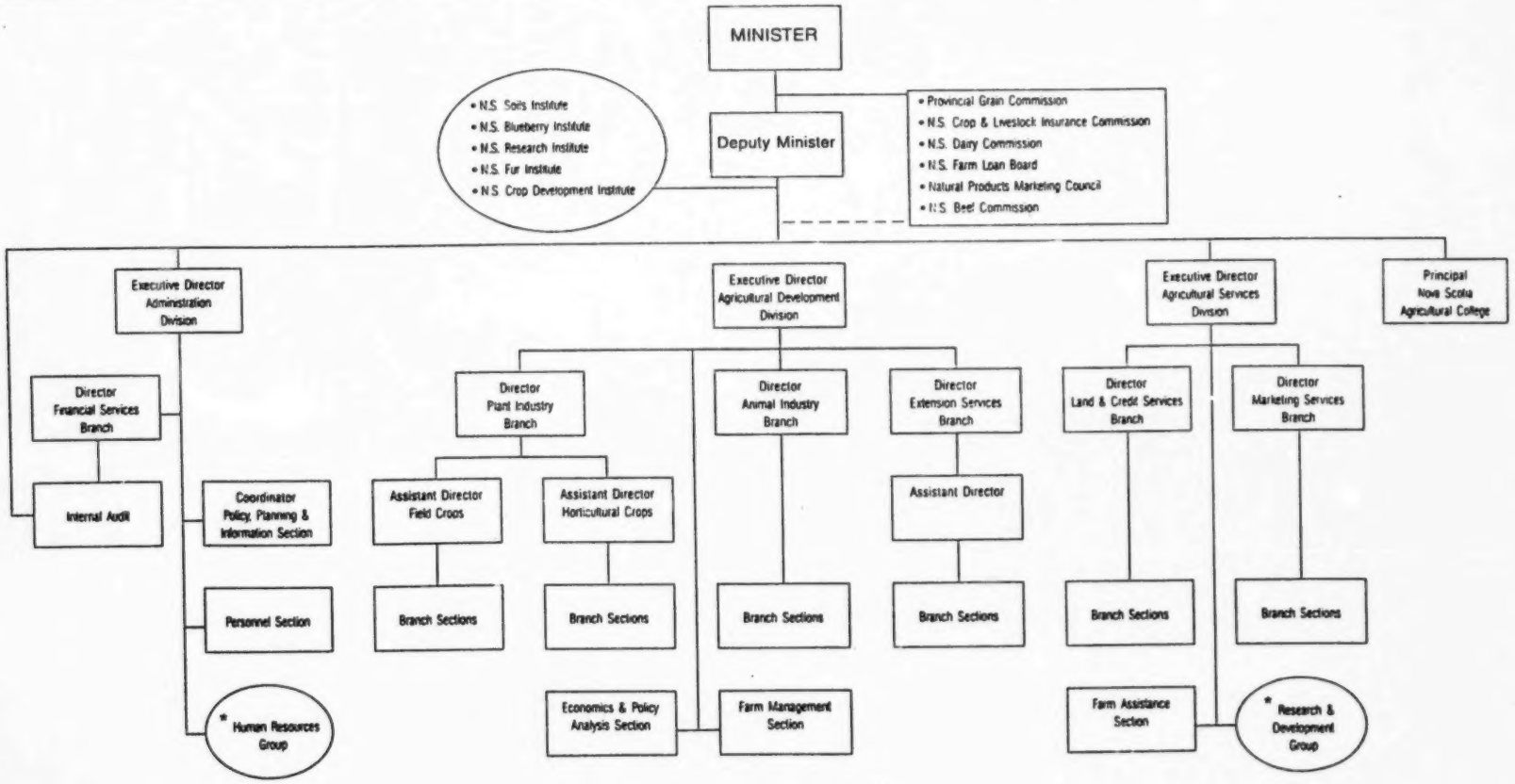
Limestone usage by Nova Scotia farmers in 1990 totalled 78,932 tons - down 9% from 1989. In the table below, limestone usage by county is set out with comparative figures for 1989, 1988 and 1987 providec.

LIMESTONE USAGE BY COUNTY

COUNTY	1990	1989	1988	1987
Annapolis	3,576	4,532	4,353	4,913
Antigonish	7,636	6,270	6,929	8,077
Cape Breton	3,739	2,449	3,108	3,125
Colchester	10,018	11,862	9,663	13,402
Cumberland	9,939	14,043	9,242	12,365
Digby	519	503	393	518
Guysboro	504	463	141	408
Halifax	1,838	2,461	2,516	2,728
Hants	6,531	9,245	8,472	10,448
Inverness	5,198	3,989	3,238	5,261
Kings	18,548	19,599	17,282	20,559
Lunenburg	1,357	3,337	2,489	3,427
Pictou	7,399	6,372	6,234	9,853
Queens	167	361	69	154
Richmond	179	197	194	286
Shelburne		79	313	42
Victoria	772	91	256	107
Yarmouth	1,012	859	1,098	1,205
	78,932	86,712	75,990	96,878

Nova Scotia **Department of Agriculture and Marketing**

ORGANIZATIONAL CHART



* Not a permanently staffed section of the Department of Agriculture and Marketing

ORGANIZATIONAL CHART
EXTENSION SERVICES BRANCH